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# Servant Leadership Towards Cultural Competency and Critical Thinking: A Mixed Methods Study in Zambia

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Servant Leadership Towards Cultural Competency and Critical Thinking:

A Mixed Methods Study in Zambia

March 25, 2019

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## Abstract

There is a paucity of occupational therapy literature related to the professional development process that occurs when students participate in immersive, international servant leadership experiences in developing countries. A scarcity of literature exists on how such culturally rich experiences can influence the development of the participating students' dispositional critical thinking and cultural competency skill sets. This mixed methods study depicts how a 3-week servant leadership experience in Zambia, Africa, measured the acquisition of dispositional critical thinking and cultural competency skill sets in novice to experienced occupational therapy students. Moreover, this study infuses a constructivist grounded theory approach to uncover a holistic understanding of the professional development process that occurred for the participating students over a 3-week immersion experience in Zambia. This study highlights how a hands-on servant leadership experience in Zambia contributed to the acquisition of professional development and problem-solving skills and cultural responsiveness for students who were trained in westernized health care practices. The participants demonstrated statistically significant increases in their critical thinking skills with medium effect sizes in truth-seeking, inquisitiveness, analyticity, systematicity, confidence, and maturity of judgment. In addition, the participants demonstrated statistically significant increases in cultural competency skills with medium to very large effect sizes in cultural awareness, cultural knowledge, cultural skills, cultural encounters, and cultural desires. The qualitative strand of the study revealed the professional growth of the students during the experience through the themes that emerged: "resilient occupational therapy lens" and "empowered occupational therapy students."

Furthermore, this mixed methods study provides a Servant Leadership Professional Development Model to illustrate the transformational professional development process that students underwent that is supported by the mixed methods data findings.

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## **Chapter 1: Introduction**

The United States Census Bureau (Colby & Ortman, 2015) claims that most Americans will belong to a minority group (any group other than non-Hispanic White alone) by the year 2044. This trend is projected to accelerate, and 1 in 5 Americans is anticipated to be born in a country outside of the United States by the year 2060 (Colby & Ortman, 2015). This shift impacts the delivery of occupational therapy services, as practitioners are required to provide value-laden services that are client-centered, evidence-based, and culturally competent (John & Thompson, 2010). In efforts to respond to society's globalized needs, educators in higher education are seeking to graduate intercultural leaders, including health care professionals (Institute of International Education, 2018). International competencies are becoming increasingly embedded in curricular designs to address both the changing population of the United States and the diversified needs of global consumers (Boateng & Thompson, 2013; Harvard Global Health Institute, 2018).

### **Background and Need**

Cultural diversity is shaping international education practices as technology and human resources have greater portability and mobility of credentials and related resources (Barker, Kinsella, & Bossers, 2010; Sinclair, 2005; Taylor, 1995). This phenomenon is known as internationalism, and it is shaping the landscape of higher education, teaching practices, and the occupations of educators (Kinsella, Bossers, & Ferreira, 2008; Westcott & Whitcombe, 2003). Researchers, practitioners, and leaders are working to adapt health care practices to respond to the globalization of health care through increased educational opportunities.

This international movement is recognized through the diverse occupational therapy lens and professional organizations around the world. The World Federation of Occupational

Therapists (WFOT) acknowledges the need for developing global partnerships to advance education, practice, and research. The WFOT recognizes the growing need for research to support the movement of internationalism and the call for sustainable quality occupational therapy services (WFOT, 2012). This international progress supports the guiding tenants of occupational therapy, which consider occupations as essential ingredients to human existence, growth, and development (Barker et al., 2010; Hasselkus, 2002).

The American Occupational Therapy Association (AOTA) joins the WFOT to promote an internationally and globally connected workforce that meets the diverse occupational needs of communities (AOTA, 2009; Witchger Hansen, 2015; WFOT, 2012). An emphasis on the connection between globalization and internationalism is supported by the notion that culture shapes engagement in occupations and perceived health and wellness across contexts (Bonder, Martin, & Miracle, 2004).

### **Statement of the Problem**

As the profession of occupational therapy seeks to meet the holistic needs of society, it is imperative that the profession demonstrate distinct value in providing services across diverse cultures to promote engagement in meaningful occupations. In their *Vision 2025*, the AOTA (2017) underscores the importance of diversity by stating that “occupational therapy maximizes health, well-being, and quality of life for all people, populations, and communities through effective solutions that facilitate participation in everyday living” (para 1). A heightened need for global health care providers is exemplified as academic institutions seek to provide international learning experiences for prospective occupational therapists (Barker et al., 2010). It is essential that today’s aspiring clinicians become competent with providing inclusive interventions to diverse populations in complex contextual environments (AOTA, 2017; Wells & Black, 2000).

As the profession of occupational therapy propels past a centennial anniversary, the AOTA continues to progress with an emphasis on providing holistic and occupation-based care that meets the diverse occupational needs of society. The profession embodies holistic care through a culturally rich focus on health, wellness, and occupation. It is essential that today's occupational therapists continue to honor the profession's values by remaining resilient with adaptive evaluation and intervention practices that are attuned to the cultural values and beliefs that define wellness and meet global demands (Frank, 2012).

The premise behind the AOTA's *Vision 2025* is that a focus on engagement in occupations across populations will facilitate the health and well-being of all individuals. This effort is supported by the growing trend to offer culturally diverse higher educational experiences; however, there is a paucity in the literature that supports student outcomes in international learning experiences (Barker et al., 2010). Occupational therapy programs are increasingly implementing culturally diverse learning opportunities with global partners; yet, there is a gap in the literature that is grounded in the process of learning, in particular, from a servant leadership perspective.

Servant leadership learning experiences can serve as indispensable avenues for the delivery of culturally inclusive care for occupational therapy students who are immersed in developing countries. Brown, Brown, and Yocum (2012) discussed how servant leadership should be used as an explicit education tool for conducting medical missions with health care students. A servant leadership attitude facilitates altruistic behaviors of self-sacrifice to serve the needs of others without expecting a returned favor. This behavior of serving others above one's own needs ultimately leads to client-centered care and practice.

Brown et al. (2012) discussed how servant leadership can be used to deliver medical mission education in international contexts and that it requires planning, team-building, and careful preparations on behalf of faculty leaders to cultivate opportunities to develop servant leadership among students. The use of a servant leadership model requires a team-oriented focus to meet the unique and diverse needs of a community, in efforts to deliver care or occupational therapy services effectively. Servant leadership is considered a transformative leadership model that facilitates a learning environment to empower others (Sturm, 2009), which can foster the personal and professional development of aspiring occupational therapists in an international context.

Johanson (2017) discussed how short-term medical missions are transformational opportunities for nursing professionals to become servant leaders. Johanson (2017) depicted how designing mission trips to meet the cultural needs of a population can lead to greater cultural awareness and empathy. In addition, the opportunity to serve others in a rural area can lead to greater creativity in problem-solving and thinking critically to meet the needs of those being served. The activation of servant leadership embedded in international contexts has the potential not only to elevate cultural responsiveness but also to ensure ethical and client-centered practice.

Dunbar (2015) discussed how servant leadership experiences align with occupational therapy's codes of ethics, which can ensure that individuals are treated with dignity, respect, and with the potential for self-fulfillment. The profession recognizes servant leadership as an integral facet of international learning experiences; however, it lacks consistent evidence in the implementation of programs in the literature. This study explored the professional development process of occupational therapy students who were immersed in an international learning opportunity as servant leaders in Zambia, Africa.

Proponents of globally inclusive learning opportunities insist that diverse international experiences may bridge the gap between theoretical understandings of culture and actual occupational therapy practice (Darnell, 2002). Despite recent progress in raising the recognition of cultural diversity, some researchers insist that this is a difficult task for the profession because of the absence of a worldwide lens on occupation and engagement. Martín, Martos, Millares, and Björklund (2015) discussed support for international learning, which may foster a greater conceptualization and understanding of global engagement. Diverse populations may offer critical insight on occupational engagement and serve to advance the culture of occupational therapy as a profession in a positive way.

Contrary to the call to be globally connected and culturally inclusive, there is a lack of published evidence to guide the development and implementation of international occupational therapy learning experiences (Barker et al., 2010; Sim & Mackenzie, 2016). Several hindrances threaten the successful development of international occupational therapy education opportunities. One barrier is the identification of consistent and reliable global partnerships and the lack of sustainable models of practice to guide and implement occupational therapy learning experiences (Witchger Hansen, 2015).

One barrier to the development of theoretical models for international learning is the scarcity of grounded and rigorous research in this field. A reduction in reliable evidence prevents the creation of theories and conceptual models to guide international learning experiences. A further hindrance to theory development is the lack of long-term exploration of international learning experiences in occupational therapy literature. Experiential learning opportunities vary considerably across opportunities, and there is a lack of consistent evidence on the duration,

intensity, and process of international learning in developing countries for occupational therapy students.

### **Importance to Occupational Therapy**

This study sought to understand the professional development processes that occur as student occupational therapists engage in an international service learning experience constructed from a servant leadership perspective. The goal of this study was to develop a rich theoretical perspective on the transformational professional development that may occur while abroad. The findings of this study will help guide the construction of future international learning experiences, inform education practices, and address the paucity of evidence on higher education experiences.

This study may illustrate that international learning experiences are beneficial for aspiring practitioners to obtain professional skill sets, such as cultural responsiveness and critical reasoning skills. This may facilitate more servant leadership experiences to be developed and refined in developing countries by accredited programs in efforts to meet the needs of diverse, occupational therapy consumers. Additional insight may be gained on how cultural values and beliefs shape engagement in occupations.

The study was implemented through an accredited occupational therapy program with didactic academic preparation delivered from a Division II university in the Midwest region of the United States. This opportunity was shaped from a servant leadership perspective to meet the immediate medical and occupation-based needs of community members in the rural village of Mwandi, Zambia. The students worked with community members that have complex medical and social needs, such as HIV/AIDs, chronic diseases, malnutrition, developmental disabilities, homelessness, and other various physical and psychosocial impairments. The students were

under the supervision of a licensed and registered occupational therapy practitioner who has previously practiced in Zambia.

### **Relevance**

Accredited occupational therapy programs around the nation are looking to provide clinical experiences to facilitate the development of critical thinking and professional development qualities in entry-level practitioners to meet the unique and diverse occupational needs of society. There is a paucity of occupational therapy literature regarding the process of international service learning and servant leadership practices while abroad. Furthermore, there is a scarcity of literature about the influence these international placements have on developing critical thinking skills and the cultural competency of aspiring occupational therapists.

Evidence shows that experiential learning opportunities are more beneficial for the development of critical reasoning skills for problem-solving than traditional, problem-based dyadic learning experiences (Coker, 2010). International service learning experiences can take the form of servant leadership, where students learn to put the needs of a community above their own and learn to negotiate unique challenges to deliver client-centered care in resource-deprived environments. Students who are immersed in such contexts are offered the experience to adapt their assessments and intervention practices to meet the needs of the community at hand. International service learning experiences can also provide enriched learning opportunities for students to self-reflect on their practices and to develop valuable skill sets that will shape their future practices.



## **Research Questions**

### **Qualitative Research Question**

1. What is the professional development process for occupational therapy students participating in an international learning experience?

### **Quantitative Research Questions**

2. Does participation in a supervised international immersion experience increase cultural competency among occupational therapy students?
3. Does participation in a supervised international immersion experience increase critical thinking among occupational therapy students?

The study was constructed on previous occupational therapy literature that examined cultural responsiveness and the assessment of critical reasoning skills. The following operational definitions will be discussed in the mixed methods study.

## **Operational Definitions**

**Culture** - Occupational engagement can impact health behaviors and shape participation in health care systems (Martín, Martos, Millares, & Björklund, 2015).

**Culture of Occupational Therapy** - The profession of occupational therapy operates under shared assumptions, beliefs, and values regarding engagement in occupations. The professional occupational therapist believes that engagement in occupations provides individuals meaning and purpose in life and that they are essential to health and wellness (Hammell, 2008).

**Experience-Based Learning** - Engagement and learning through clinical experiences is a central tenant to the health care professions. Through observation, simulation, supervised clinical experiences, service learning, and interprofessional activities, students apply learning through experience (Lowry, 2017).

**International Service Learning** - Learning that is similar to the above definition; however, learning occurs in a country outside of the country where the program of study resides (Pechak & Thompson, 2009a).

**Servant Leadership** - This style of leadership requires an intentional focus on the diverse or unique needs of a community, where a team-oriented approach is used to serve the community (Brown, Brown, & Yocum, 2012).

**Service Learning** - A learning experience that is structured in nature and has componentry that provides services to community members. The learning experience has specific learning objectives, reflection, and careful preparation (Pechak & Thompson, 2009a).

### **Assumptions**

The international servant leadership experience will provide a rich contextual milieu to develop the professional behaviors and skill sets of the participating occupational therapy students. The students will participate as servant leaders, and they will view the needs of the community as the priority for the delivery of occupational therapy services. The development of mutual respect, trust, and collaborative relationships will be required of the students working with community participants and populations. The students will not have traditional, westernized clinic resources or equipment and will have to adapt occupational therapy practices to meet the unique needs of the community. The investigator will mentor the students, and provided them with routine opportunities to engage in reflective practices to gain self-awareness and to discuss the servant leadership experience.

### **Role of the Investigator**

The investigator has traveled and studied in Zambia, Africa, on two prior occasions: once as a student and once as a faculty leader. These prior experiences have allowed the investigator to gain a diverse perspective from the vantage point of a first-generation college student and as an occupational therapy educator. The perspective gained as a first-generation student taught the investigator how important international experiences can be for teaching students about the value of diversity, which ultimately influenced her practice as an occupational therapist. This knowledge also influenced her motivation to provide the same opportunities to future occupational therapists as an academic educator, which reinforced the investigator's motivation to study the impact that such experiences abroad can have on her students' learning.

Prior cultural immersion in Zambia provided the opportunity for the investigator to develop fully collaborative relationships with stakeholders at the Home for AIDS Orphans in Mwanzi, Zambia. These developed relationships allowed the investigator to focus on developing a mixed methods study to assess professional development, cultural competency, and the dispositional critical thinking skills of the research participant versus focus on complex logistical considerations that a new cultural immersion would require. Prior insight and knowledge of the Zambian culture and context and of the social and political factors were pivotal to developing the 3-week immersion experience in this developing country. This advantage allowed the investigator to focus on developing the mixed methods study and answering the research questions that guided the study.

### **Summary of the Chapter**

As the profession of occupational therapy seeks to address the holistic and occupational needs of society, it is essential that the profession demonstrate distinct value and worth in

providing services across varied populations, cultures, and communities. This effort supports the guiding principles of occupational therapy, which views occupational engagements as essential features of human existence and development (Barker et al., 2010; Hasselkus, 2002). It is vital that today's aspiring practitioners promote engagement in meaningful occupations through the provisions of services to diverse individuals and populations in complex environments (AOTA, 2017; Wells & Black, 2000).

It is imperative that innovation shapes the leadership practices of today's practitioners, educators, and researchers to generate knowledge to inform practice and to promote resiliency for occupational engagement (Innes, 2017). This study serves as an essential component of evaluation for an international servant leadership experience that will be offered to occupational therapy students. This study may answer questions regarding the value of such experiences, and bridge the theoretical gap between practice and education, to meet the larger needs of a globalized society. This study may demonstrate the value of servant leadership experiences for the development of creativity and culturally responsive problem-solving for participating occupational therapy students. It remains imperative that today's aspiring practitioners meet the diverse needs of society to help individuals engage in occupations that are meaningful, purposeful, and foster quality of life.

## **Chapter 2: Review of the Literature**

The profession of occupational therapy recognizes that engagement in meaningful occupations is a fundamental facet of human existence that shapes the growth, development, and health behaviors of individuals (Barker et al., 2010; Hasselkus, 2002). Occupational therapy paradigms are evolving to support human engagement in occupations to meet the increasingly diverse, multicultural needs of society. A call to be culturally competent is supported by this trend of globalization and the projection that the United States will be comprised mainly of ethnic groups (Taylor, 2014). This catalyst of change is shaping the delivery of education, which begins with the next generation of practitioners (Short & St. Peters, 2017). Educators at universities and colleges are working to respond to the increasingly globalized market of health care by offering international learning experiences, which have quadrupled over the last 20 years (Pappano, 2007).

The Accreditation Council for Occupational Therapy Education (ACOTE, 2013) proclaims that accredited institutions have the responsibility to ensure that entry-level practitioners possess the skills to meet the evolving needs of today's health care consumers. This acquired skill set must demonstrate a breadth and depth that is inclusive of diversity for individual and population health (AOTA, 2013). This contemporary landscape of care requires the use of critical thinking skills, adaptation, and cultural competency to be threaded into occupational therapy curricula. The drive for competence is supported by experiential learning opportunities where students gain first-hand knowledge on how to negotiate cultural differences when working with diverse populations (Short & St. Peters, 2017).

This chapter will explore the urgency for a globally connected profession and the efforts made to address the occupational needs of clients, populations, and communities across contexts.

This study will discuss the current paradigm of international occupational therapy education and the immediate need for culturally responsive practitioners to lead the profession. Furthermore, this study will address the paucity of occupational therapy literature focused on international practice by executing a mixed methods study to explore the professional development process of students who participated in a servant leadership experience in Zambia, Africa.

### **Cultural Competency in Occupational Therapy Training**

As the profile of health care clientele becomes increasingly diverse, providers require education and training that echoes this expansion. Both administrative and university leaders recognize that cultural competency occurs in the academic preparation phase for aspiring occupational therapy practitioners (Short & St. Peters, 2017). Accredited programs are using a variety of instructional methods to support the acquisition of critical thinking, cultural sensitivity, and professional development in the education of entry-level practitioners (Coker, 2010; Royeen, Mu, Barrett, & Luebben, 2001).

### **Occupational Therapy Education**

The pursuit of developing critical thinking and reasoning skills through entry-level education remains a resilient endeavor in occupational therapy curricula across the United States. The task to ignite critical reasoning and problem-solving is not easily achieved in the contexts of traditional classrooms. Coker (2010) discussed how the use of rudimentary problem-based learning and case studies in classrooms do not fully accelerate clinical learning or the transfer of knowledge to clinical contexts. The application of clinical immersion needs to occur in order to facilitate clinical reasoning, which connects real-life experiences with clients who are embedded in actual settings.

## **Cultural Competency Training Through Service Learning**

The AOTA (2007) and the WFOT (2012) have made commitments to meet the needs of a globally connected profession; however, a lack of literature exists on ways to address this need in a global context. Witchger Hansen (2015) discussed the role of creating global partnerships to offer avenues for international research, practice, and education in occupational therapy. The development of global partnerships is critical to the profession, and the sustainability of such relationships relies on mutual respect for and the creation of environments for reciprocal learning. One effective way of addressing the need for a globally connected profession is through the development of international learning opportunities.

Cipriani (2017) depicted experiential learning in diverse countries as opportunities to explore international education experiences to promote professional development and growth. Qualitative occupational therapy studies highlight the lived experiences of students while immersed in international service learning experiences. Humbert, Burket, Deveney, and Kennedy (2012) discussed how students immersed in diverse countries gained insight into the role of occupational therapy and how political and social contexts shape occupational engagement. This research offers insight into the qualitative benefits of international education; however, it lacks the quantitative effects of international learning on developing practitioners.

Pechak and Thompson (2009b) discussed the absence of best practices for developing international service opportunities in physical therapy education, despite mounting globalization and international teaching practices in the United States. These scholars illustrated a conceptual model for international service learning opportunities and how collaborative partnerships cultivate education and research. The researchers discussed optimal components of international learning as structured planning and reflection, relationship building, and reciprocal relationships

with community members (Pechak & Thompson, 2009b). A conceptual model for the development of international education practices remains absent in the literature of occupational therapy.

Most of the rigorous international learning literature has been completed in professions outside of occupational therapy. Conway, Amel, and Gerwien (2009) depicted a meta-analysis of service learning in psychology students that illustrated that academic outcomes are indicative of increased knowledge, cognitive abilities, and application of knowledge. Evidence demonstrated how built-in reflective practices facilitated the application of lessons learned, which led to students' increased leadership and interpersonal skills. The researchers discussed that students have the opportunity to change stereotypical behaviors and perspectives when they learn with marginalized cultures. Barker, Kinsella, and Bossers (2010) echoed these findings and proclaimed that international learning experiences foster increased quality care for recipients of services after learning in multicultural environments by health professional students. A need for a meta-analysis to guide international learning outcomes in occupational therapy remains evident today.

### **Benefits of International Learning Experiences**

While the logistics of developing and implementing international learning experiences can be a daunting task, there are several benefits to student engagement in experiences abroad, including developing professionally, developing cultural competency, gaining self-awareness, and learning clinical practice skills. The inherent benefits of international learning will be illustrated by the existing occupational therapy literature.



## **Professional Development**

International learning experiences can serve as a catalyst for opening the minds of and broadening the horizons for students to perceive the world in a holistic manner while facilitating a quest for learning (Barker et al., 2010; Shieh, 2004). This acquisition of an all-inclusive lens is achieved through self-awareness, which is congruent with using reflective practices to advance development. Keane and Provident (2017) argued that international service learning experiences have the potential for increasing professional growth and behaviors; however, it does not guarantee such results. The researchers discussed how predeparture work is essential to facilitating self-awareness, recognition of differences between cultures, and becoming knowledgeable about the host country.

## **Developing Self-Awareness**

Laverdure (2017) discussed how the development of professional growth can be gained through reflective practices to transform competency into informed practice. The integration of self-awareness shapes critical decision-making, which is imperative for becoming attuned with the cultural and occupational needs of others. This obtainment of cultural sensitivity can influence how occupational therapists make clinical judgments, which later influences the design of intervention plans and client outcomes (AOTA, 2018).

International learning experiences can illuminate the self-perceptions of one's cultural values and shape practitioner behavior. This professional lens can result in greater awareness of other's perceptions of health and wellness (Gray, Murdock, & Stebbins, 2002). Self-appraisal and awareness are best used to respond to and solve complex clinical problems, which can inform practice and allows for critical decision-making in developing practitioners.

Occupational therapy literature discusses how reflective practices can facilitate decision-making. Driscoll and Tech (2001) defined self-reflective practices as inquiring: “What happened? So, what? Now what?” These self-appraising questions can guide adaptive thinking to promote innovative practices, which can connect theory with practice (Driscoll & Tech, 2001). Self-reflective practices can accelerate learning and bridge the gap between occupational therapy theory and practice (Gleeson, 2010). Lowe, Rappolt, Jaglal, and Macdonald (2007) discussed how self-reflections can transform complex concepts into routine practice, which can be difficult to achieve in traditional classrooms. This application of self-awareness can be infused into international learning experiences, which can help novice practitioners develop into competent practitioners (Laverdure, 2017).

### **Cultural Competency**

Today’s evolving realm of health care requires clinicians to solve complex problems based on ethical principles in addition to medical knowledge (AOTA, 2015c). The AOTA’s Advisory Opinion for Ethics Commission (2018) discussed how culturally competent clinicians understand that health behaviors and occupations are uniquely defined by culture. Short and St. Peters (2017) discussed how cultural responsiveness begins at the curriculum level, which can be the result of an intentional and ethical pedagogical design for student education.

Keane and Provident (2017) discussed how the implementation of international service learning experiences can facilitate learning, professional development, and cultural competency. Cultural competency can best be depicted as a journey of discovery rather than as an end product (AOTA, 1995). Cultural responsiveness involves understanding the complex interplay of social and cultural normative health behaviors, and how these concepts impact the delivery of occupational therapy services. Cultural competency requires clinicians to assess client factors

carefully and work to develop intervention plans that meet the unique needs of individuals in service delivery (AOTA, 2018).

Providing quality occupational therapy services is the gold standard of the profession. Cultural competency can be the key ingredient for the delivery of quality, occupation-based services. Provisions for providing culturally competent care require work and continuing professional development on behalf of clinicians (AOTA, 2015b). Pope-Davis and Coleman (1997) discussed how cultural competency requires self-awareness and knowledge to inform cultural and ethical decisions. Cultural competency serves as an ongoing process of self-appraisal of one's own culture and the culture of others. This continuum of cultural competency and responsiveness can be achieved through integrated reflective practices, which is a necessary ingredient for successful international learning experiences for student occupational therapists (Keane & Provident, 2017).

### **International Learning**

International experiences serve as a tool to address globalization and to learn problem-solving skills while being immersed in diverse health care contexts (Horton, 2009; Talero, Kern, & Tupé, 2015; Thibeault, 2006). The learning objectives of study abroad programs can vary from program to program; however, they often consist of reciprocal learning and working on behalf of students and community members. Health care research depicts the importance of working together, rapport building, and the development of mutual respect to understand the strengths and needs of the community being served (Bently & Ellison, 2007).

### **Standards of Continuing Competence Guide Practice**

The inherent benefits of international service learning for occupational therapy students align with the AOTA (2015a) *Standards of Continuing Competence*. International service

learning experiences support the need for developing competency to underscore the need for inclusive and quality-laden occupational therapy services. The *Standards for Continuing Competence* (AOTA, 2015a) require the continued evaluation of current educational practices to ensure student therapists become lifelong learners and advocates of continued professional development. The AOTA (2015a) portrays that continuing competence is an ongoing process in which clinicians evolve through changes in knowledge, critical reasoning, interpersonal skills, performance skills, and ethical practice in current and future occupational therapy roles. This quest for professional growth aligns with the shared belief that occupations facilitate engagement in meaningful daily activities across individuals, populations, and contexts (AOTA, 2014; AOTA, 2015a).

### **Knowledge**

The first standard of the AOTA's (2015a) *Standards for Continuing Competence* is based on knowledge and articulates the necessity for entry-level clinicians to apply core occupational therapy practices to multiple context and professional roles. This requires occupational therapy practitioners to meet both client and population needs based on best practices, which aligns with evidence and occupation-based practice (AOTA, 2015a). This standard can be achieved in a variety of ways, including occupational therapy fieldwork, service learning, or international servant leadership experiences that offer diverse exposure to clients, populations, and contexts.

### **Critical Reasoning**

The acquisition of increased problem-solving abilities and the use of critical reasoning skills is the second pillar of the AOTA's (2015a) *Standards of Continuing Competence*. This involves the use of deductive and inductive reasoning skills to make sound decisions and to adapt clinical practices to meet the needs of individuals or populations receiving occupational

therapy services. The use of critical reasoning requires analysis of evidence and environmental factors and the synthesis of client factors to understand complex occupational performances (AOTA, 2015a). This process of deep, reflective thinking on behalf of students fosters adaptation to do what is best for the client.

Academic institutions across the United States grapple with methods to facilitate the development of higher order thinking and the generation of more profound cognitive practices (Sweet, Blythe, & Carpenter, 2018). This emphasis on cognition builds on Bloom's Taxonomy to be inclusive of six steps: learn, remember, understand, apply, analyze, evaluate, and create (Anderson & Krathwohl, 2001). The premise behind deep learning is based on the acquisition of low-level cognitive skills to build on higher-level cognitive skills (Sweet et al., 2018). This type of thinking is paramount for the preparation of entry-level practitioners to produce critical analysis on occupational performances and to construct holistic intervention plans in practice.

The ability to critically think and reason is a fundamental facet of occupational therapy education (Velde, Whittman, & Vos, 2006). The *Standards of Occupational Therapy Practice* (2004) validate the need for occupational therapists to use clinical judgment to select, measure, and interpret an individual's ability to engage in valued occupations. As the practice of occupational therapy evolves, it is essential that instructors shape educational curricula to reflect such needed skill sets to support today's health care realm. Coker (2010) discussed how teaching basic occupational therapy education can be routine; however, teaching higher-level cognitive skills, such as critical reasoning, is a complex process. This process of critically thinking is a fundamental requirement for adaptation of therapeutic interventions to meet the needs of clients with complex medical diagnoses.

## **Interpersonal Skills**

One avenue for developing critical reasoning capacities is supported by the use of therapeutic use of self and interpersonal skills to meet the needs of occupational therapy consumers. This process requires cultural awareness, responsiveness, and innovation to adapt practices. The development of effective interpersonal skills entails building collaborative relationships with families, colleagues, and consumers (AOTA, 2015a).

Springer (2016) discussed how gaining a holistic understanding of non-English speaking clients can build therapeutic rapport. His occupational therapy practice in a U.S. Army clinic taught him the value of infusing meaningful roles, rituals, and beliefs into practice when working with individuals from diverse cultural backgrounds. Springer's (2016) commitment to cultural responsiveness solidified a path for positive outcomes and the development of therapeutic relationships to progress his consumers' engagement in meaningful occupations.

## **Performance Skills**

The fourth facet of the AOTA's (2015a) *Standards of Continuing Competence* is the performance skill standard. This standard requires clinicians to deliver occupational therapy services that embody the art and science of the profession while meeting the unique and personal needs of those being served. This process requires the delivery of client-centered care, education, or consultation that delivers positive change (AOTA, 2014). The adaptation of practice can support occupational therapy evidence to ensure optimal client and population outcomes through therapeutic use of self (AOTA, 2015a).

Barker et al. (2010) discussed the qualitative findings associated with learning in an international occupational therapy placement. The researchers found an increase in interpersonal relationships, mutuality, and communication on behalf of the participating students. These

outcomes are consistent with the art and science of the profession and highlight the benefits of cultivating interpersonal relationships to shape the professional skill sets of students. Witchger Hansen (2015) discussed the benefits of international learning and the development of reciprocal learning, sensitivity to diverse cultures, and increased problem-solving abilities in students (Bourke-Taylor & Hudson, 2005; Witchger Hansen, 2015).

### **Ethical Practice**

The final component of the AOTA's (2015a) *Standards of Continuing Competence* is the standard of ethical practice, which is the inclusive application of the *Occupational Therapy Code of Ethics* (2015c) into professional roles (AOTA, 2015a). This requires clinicians to thread ethical principles into daily practice as well as the ability to identify, analyze, and problem solve through challenges. This process of critical reasoning requires clinicians to consider complex contexts that are inclusive to diverse perspectives while supporting ethical occupational therapy practices (AOTA, 2015c). Barker et al. (2010) discussed how students become more adept with navigating ethical challenges once immersed in diverse cultures, in addition to sensitivity to the differences that exist among cultural groups.

### **Occupational Therapy Education**

Clinical education has long been a core component of occupational therapy education. Clinical education can bridge the gap between classroom education and clinical practice (Gat & Ratzon, 2014; Jung, Sainsbury, Grum, Wilkins, & Tryssenaar, 2002). Clinical education in the form of occupational therapy fieldwork experience can serve to prepare students for the reality of practice after graduation. Occupational therapy fieldwork requires the exposure of diverse physical and psychosocial conditions in Level I and Level II clinical experiences that are designed to ensure preparation for entry-level practice.

Occupational therapy fieldwork in the United States acts as a vehicle to facilitate academic learning. The goal of occupational therapy fieldwork education is to develop students' professional competency as entry-level practitioners (AOTA, 2009). Occupational therapy fieldwork can transfer didactic coursework to the development of entry-level skill sets. This transformative learning process can enrich the occupational lens of future practitioners to be adaptive to the occupational needs of society (Innes & Stav, 2018).

Occupational therapy programs are shaping fieldwork experiences in response to globalization and the accelerated cultural trends exhibited in today's health care consumers. International fieldwork experiences have been found to advance professional development skills, such as adaptability, autonomy, and creativity for delivering client-centered intervention plans (Barker et al., 2010). Ekelman, Bello-Haas, Bazyk, and Bazyk (2003) discussed how international fieldwork experiences have facilitated the development of holistic intervention plans that are compatible with the values, beliefs, and customs of occupational therapy recipients.

The WFOT and various accredited occupational therapy programs across the United States promote international fieldwork opportunities to make graduate students holistic health care providers (Hocking & Ness, 2002; Sim & Mackenzie, 2016). International occupational therapy fieldwork placements have been found to provide lasting benefits for developing professional skill sets, personal qualities, and insightful practice in practitioners.

Sim and Mackenzie (2016) discussed how a 7-week immersion in Australia helped students translate health into engagement in occupations despite contextual and cultural barriers. This opportunity helped students transfer the philosophy of occupational therapy to meet the contextual needs of diverse community members. Developing countries, in particular, have been



found to offer contextual challenges that require immediate adaptation and can facilitate long-lasting growth in students.

### **A Call for Global Service**

Talero, Kern, and Tupé (2015) discussed how service learning experiences are becoming common avenues for teaching and learning in occupational therapy curriculums. Service learning is described as experiential opportunities that offer a service to a community that is both structured and planned, and which contains components of intention reflection during and after an experience. Service learning experiences are designed to provide specific learning objectives to foster student learning, which distinguishes these experiences from volunteer work (Cashman & Seifer, 2008). The emphasis on working and serving in global contexts is shaping the construction of new opportunities in higher education as academic stakeholders recognize the value of engaging students to be service-oriented for the delivery of care for community consumers.

International education opportunities are becoming pillars of higher education institutions across the United States. Academic programs, universities, and colleges are recognizing the benefits of immersion experiences and view global competencies as top priorities for civic responsibilities (Boateng & Thompson, 2013). Proponents of international learning insist that immersion experiences increase the problem-solving skills, self-awareness, and cultural awareness of students (Bourke-Taylor & Hudson, 2005). Brown et al. (2012) discussed how servant leadership experiences can be a transformational process for students, where it is learned to serve others in need. These acts of altruism can shape the professional development of aspiring occupational therapists and inform future practices.

## **International Service Learning**

International service learning experiences fall in the category of service learning; however, they occur in a country that is outside of the origin of the participating students (Pechak & Thompson, 2009a). International service learning experiences involve strategic community service projects with embedded reflections to reinforce learning. This emphasis on providing a service in an environment that is diverse from the students' country of origin can enhance civil responsibility while teaching the importance of understanding human engagement and the connection made to occupational performances (Hatcher & Erasmus, 2008).

International service learning opportunities are optimal avenues for the application of servant leadership principles to be applied to health care education. Servant leadership principles are being woven into international service learning experiences to deliver interprofessional care that focuses on the needs of the community and the health care team and the growth of students as future practitioners (Neill, Hayward, & Peterson, 2007).

The premise behind academic service learning is to place learning in the context of socialization in a community. Teaching practices consist of immersion into a diverse culture, which can facilitate socially appropriate problem-solving, growth, and development (Conway, Amel, & Gerwien, 2009). Students can gain first-hand knowledge on how to navigate social, communicative, and cultural challenges, and to learn adaptive techniques for administering occupational therapy evaluations and interventions when working to meet the needs of the host community.

## **International Learning and Accreditation**

Current occupational therapy accreditation standards are congruent with international learning and service-oriented experiences (Cipriani, 2017; Gitlow, 2011). The ACOTE (2011) articulates the following standards for practice:

B1.5: Demonstrate an understanding of the ethical and practical considerations that affect the health and wellness needs of those who are experiencing or are at risk for social injustice, occupational deprivation, and disparity in the receipt of services.

B1.6: Demonstrate knowledge of global social issues and prevailing health and welfare needs of populations with or at risk for disabilities or chronic health conditions.

B2.5: Explain the role of occupation in the promotion of health and the prevention of disease and disability for the individual, family and society.

B5.26: Understand when and how to use the consultative process with groups, programs, organizations, or communities.

B6.6: Utilize national or international resources in making assessment or intervention choices and appreciate the influences of international occupational therapy contributions to education, research, and practice. (p. 19-29)

## **Theoretical Perspectives**

The following theoretical perspectives will guide the proposed study. Occupational adaptation, experiential learning theory, leadership theories, and servant leadership principles as applied to international learning experiences for occupational therapy students will be the guiding tenets for the construction and execution of this mixed methods study.

## **Occupational Adaptation**

International service learning projects require adaptation on behalf of immersed students. Occupational adaptation (OA) occurs to navigate the physical, social, and cultural environmental and norms of an international service learning immersion. Adaptation is often required on behalf of students to adapt to languages, customs, beliefs, and social norms of the international context. These factors are often diverse and require emotional and cognitive coping skills to overcome strong feelings and, perhaps, first-hand experience as a minority (Innes & Stav, 2018).

The tenants of adaptation strongly influence the development of occupational therapy theory and practice. OA is considered both a state and a process (Schultz & Schkade, 1992). OA is a normative process in which functional changes occur in a person, and it is most prominent during times of transition, which requires individual adaptation. Occupation provides ways for people to adapt when encountering challenges and can result in an alteration to any of the three systems: sensorimotor, cognitive, and psychosocial, as well as subsystems (Walker & Ludwig, 2004).

OA is depicted as “a state of competency in occupational functioning to which human beings aspire” (Schultz & Schkade, 2003, p. 105). The process of OA happens internally for individuals when encountering challenges during attempts to master an occupational challenge. OA occurs as individuals work to meet challenges while immersed in an environment by demonstrating a successful response, which is known as relative mastery. OA is reliant on adaptive energy, adaptive modes, and adaptive behaviors, which are necessary to an adaptive response (Dunbar, 2007).

Varied clinical environments elicit occupational responses that are critical for development in occupational therapy students. Occupational therapy education is contingent on

the principles of adaptation and mastery through careful pedagogical design. International service learning opportunities offer an avenue for student learning that can transform cultural and environmental challenges into clinical experiences of adaptation that shape future practice occupations.

### **Experiential Learning Theory**

International service learning for occupational therapy students involves a holistic adaptation to the environment and is supported by Kolb's (1984) experiential learning theory. Kolb (1984) discussed how this process of adaptation is facilitated by experimenting in a new environment, which can be transformational for learning. This type of experiential learning is fostered by reflective observations on behalf of learners and the process of change in cognitive processing. Short and St. Peters (2017) discussed how international service learning projects developed from experiential learning theories and that pedagogical designs benefit the development of student occupational therapists, a concept this dissertation strives to develop.

### **Leadership Development**

Leadership development through experiential learning has become a foundational piece of health care education. There is an inherent gap that exists between practice and leadership theory in the educational preparation for aspiring health care providers. Effective leadership on behalf of health care professionals is required for addressing the global demands of society that are both complex and extend beyond the realms of clinical competence (Gordon, Rees, Ker, & Cleland, 2015; Weston et al., 2008). Experiential learning in the form of service learning has been threaded into the curriculum to develop servant-leadership practices to enhance clinical competency. Cipriani (2017) discussed how international service learning opportunities can

serve as an innovative way for occupational therapy students to become culturally competent and to meet the global needs of society.

### **Servant Leadership**

International service learning opportunities are designed to serve the needs of others and provide a vehicle for transformative learning while meeting accreditation standards in occupational therapy. International service learning events can be depicted as opportunities to engage in servant leadership practices, where students suspend individual needs to work toward the goals of a community. Brown et al. (2012) discussed how mastery of leadership traits is not easily taught to health care students. Qualities, such as compassion, altruism, beneficence, and serving others above individual interests, require educational experiences oriented around service learning opportunities (Nemire, Margulis, & Frenzel-Shephard, 2004).

Servant leadership is an others-oriented style of leadership that ensures the well-being of others in a positive and motivating manner. Servant leadership builds on the capacity of others and is conscientious in the development, success, and growth of those being led. Servant leaders foster relationships out of trust and respect in efforts to uplift and to actualize the potential of others (Dillon, 2001).

Servant leadership is built on the theoretical foundations of 10 characteristics: empathy, healing, listening, awareness, stewardship, foresight, conceptualization, persuasion, growth of individuals, and growth of communities (Spears, 1995). Advocates of servant leadership insist on teaching aspiring health care professionals how to become servant leaders in efforts to shape the delivery of high-quality health care for those in need (Huckabee & Wheeler, 2011).

Servant leadership parallels the practices and attitudes outlined in Kouzes and Posner's (2012) qualities of extraordinary leaders. Servant leadership is based on nurturing the potential in

others and aspiring toward a shared vision. The servant leadership commitment portrays a shared vision to help others achieve self-actualization. This leadership serves as the foundation of conducting service learning opportunities in developing countries, where the needs of communities direct the actions of aspiring occupational therapists. The process of becoming a servant leader does not require a formal title and is based on actualizing the leadership capacity of anybody on the health care team. Servant leadership practices empower aspiring practitioners, foster professional development, and inform future practice (Brown et al., 2012).

Brown et al. (2012) discussed the actions of servant leaders as the ability to influence the behaviors of others by portraying genuine interest in those being led. The leader is intentional about meeting the needs of others, which influences the actions of the follower and shapes behavior. Servant leadership can be a revolutionary asset when designing international occupational therapy education to influence change (Thomas, du Toit, & van Heerden, 2014). Servant leadership literature suggests improved coping, adaptation, and increased interpersonal skills by careful design of international study abroad opportunities (Brown et al., 2012).

### **Research Approaches in the Existing Literature**

Inconsistencies exist in the development, implementation, and research of international learning endeavors in the profession of occupational therapy. Short and St. Peters (2017) explored the influence of an 8-day international service learning excursion to Haiti with occupational therapy doctorate students from the United States. The researchers used a cultural intelligence scale (CQS) to quantitatively measure four domains of professional development: metacognitive, cognitive, behavioral, motivational, and behavioral intelligences. Short and St. Peters (2017) concluded with the recommendation for international learning in the pedagogical design for occupational therapy programs.

Barker et al. (2010) discussed the results of a constructive grounded theory study on the personal and professional development that occurred from an international occupational therapy practice placement. The researchers conducted semi-structured interviews to gain insight into the learning process of eight practitioners who participated in an international placement as student occupational therapists. The participants reported increased feelings of competence, confidence, creative thinking, and the development of interpersonal relationships. Barker et al. (2010) illustrated that the gains made in the qualitative study should inform future educational research to expand on the provisions of international learning experiences to ensure global practitioners in occupational therapy.

Keane and Provident (2017) discussed the implementation of an online learning course combined with a 9-day service learning project in Ibarra, Ecuador, for six occupational therapy and six physical therapy students. The researchers provided pre-trip departure preparation on cultural sensitivity and education on Ecuador, as well as pre-departure modules to increase self-awareness of student participants. Quantitative data were obtained from the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version (IAPCC-SV) to provide pre-posttest data. The study demonstrated an increase in cultural competency and sensitivity on behalf of the interprofessional group of students and the benefits of international learning excursions for developing practitioners.

Coker (2010) measured the effects of experiential learning for the development of critical thinking and reasoning skills in occupational therapy students. The quantitative study examined the effects of hands-on experiential learning with a quasi-experiential design and investigated the effects of a one-week camp working with children with hemiplegic disabilities. Coker (2010) measured critical reasoning and thinking with pre-posttest data from the California Critical



Thinking Skills Test (CCTST) and the Self -Assessment of Clinical Reflection and Reasoning test (SACRF). The results of the study provided quantitative data on how experiential learning opportunities can improve critical thinking and reasoning skills in occupational therapy students. The results of the study support the generation of a continued need for exploration of critical reasoning and thinking skill development for future practice.

Innes and Stav (2018) explored the effects of an international Level I fieldwork for occupational therapy students in Ibarra, Ecuador. The researchers discussed the results of a phenomenological study that highlighted the benefits of international fieldwork for the development of professional skill sets for student occupational therapists. The study illustrated how a 10-day, international excursion facilitated problem-solving and critical thinking skills, as well as the development of an occupation-based lens for students. The study also portrayed the acquisition of a culturally inclusive perspective that prepared aspiring practitioners to meet the needs of community members in Ecuador.

Innes and Stav (2018) discussed how the international Level I fieldwork shaped the professional lens of student participants to be client- and family-centered, in addition to being occupation-based. This cultural inclusivity allowed the students to gain awareness on how to use themselves as agents of change and to develop one's therapeutic use of self. Furthermore, the researchers depicted how students developed critical thinking skills as they adapted available resources to construct interventions that were meaningful to clients. This creativity was supported by the lack of westernized typical clinic resources, and students gained the ability to tap into their inherent abilities to critically problem solve. The findings of the qualitative study reinforced the need for further investigation on how international occupational therapy

immersion experiences contributed to greater student attributes of cultural responsiveness and critical thinking skills.

Scarce literature exists on the qualitative and quantitative benefits of servant leadership experiences in occupational therapy, despite increasingly threaded excursions into higher education. Huckabee and Wheeler (2011) discussed how it is the duty of health care educators to support leadership training in the educational curriculum. The researchers measured five subsets of servant leadership in physician assistant (PA) students that included altruism, emotional healing, persuasive mapping, wisdom, and organizational stewardship. The quantitative data demonstrated that PA students maintained servant leadership qualities when working with underserved and local community members, which underscored the importance of versatility in health care leaders.

There is a paucity of evidence on international service learning, specifically on servant leadership excursions for occupational therapy students represented in the literature. This proposed mixed methods study was developed to bridge the gap between qualitative and quantitative findings on international educational opportunities for occupational therapy practitioners. Further limitations exist in studies that measure both critical reasoning and cultural competency skills for learning in developing countries.

### **Summary of Literature**

The profession of occupational therapy strives to meet the inclusive needs of society and to demonstrate distinct value across cultures to promote engagement in meaningful occupations. The AOTA and the WFOT proclaim the necessity to be globally connected and culturally inclusive; however, there is a lack of published literature on international occupational therapy learning experiences. This chapter explored the existing literature on international learning and

reinforced for the necessity of continued published work in this area of practice for occupational therapy.

This study seeks to add to the body of literature to ameliorate the gap between theoretical ideas and clinical realities of student occupational therapists engaged in international servant leadership experiences. The goal of this study was to develop an opulent theoretical perspective on the transformational learning experiences that occur while immersed in a developing country. The data obtained will inform future practices and help to enhance the design or development of learning outcomes for student occupational therapists. This study may illuminate gains made in professional development, such as adaptation, critical thinking skills, resiliency, or cultural responsiveness gained from international educational practices. This may facilitate the development of servant leadership experiences in diverse countries by accredited occupational therapy programs in efforts to meet the global and occupational needs of today's consumers.

### **Chapter 3: Methodology**

The purpose of this mixed methods study was to gain an understanding of the professional development processes that occurred as student occupational therapists participated in an international service learning experience in Zambia, Africa. This international experience was developed from servant leadership principles, which aim to serve the inclusive needs of a community. In addition to building a rich, theoretical perspective of the professional development processes that occurred during an international experience, this study measured changes in critical reasoning and cultural responsiveness in student occupational therapy participants. Furthermore, it is the ambition of the investigator to share research findings in efforts to inform occupational therapy practice, education, and to develop an international learning framework.

This chapter depicts the methodology of the mixed methods study that explored the professional development of occupational therapy students during a servant leadership experience in Zambia, Africa. The study was constructed from previous occupational therapy literature that examined the development of cultural competency and critical thinking skills required of entry-level practitioners. The investigator sought to answer the following research questions:

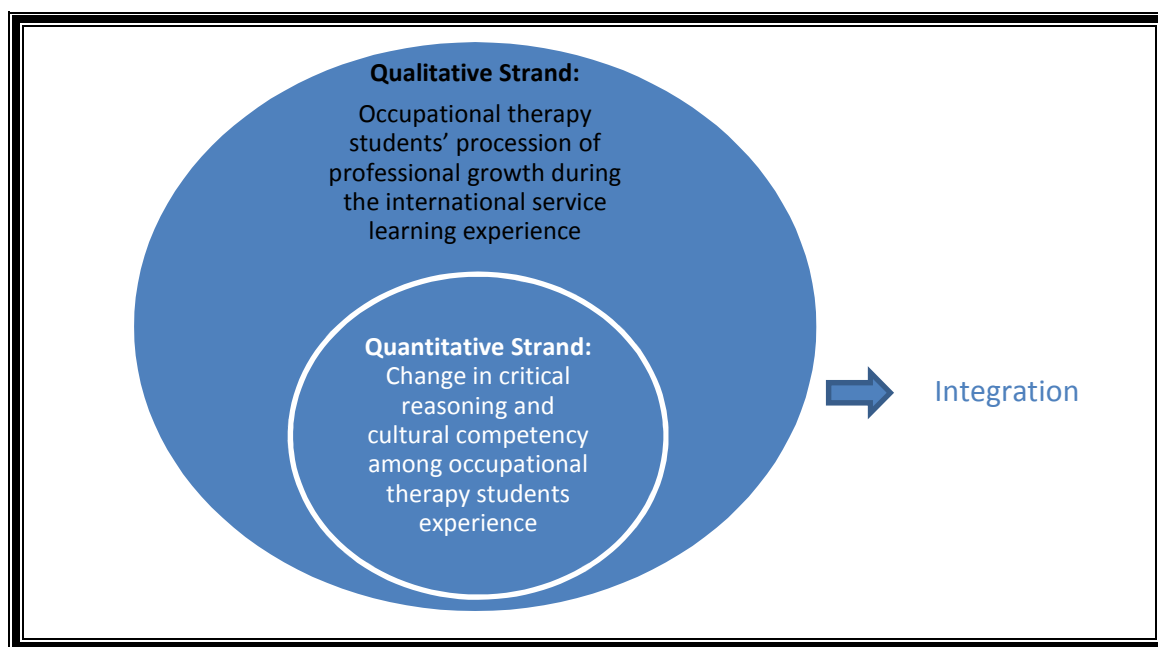
1. Does servant leadership in the form of international service learning in Zambia, Africa, enhance cultural competency in occupational therapy students?
2. Does servant leadership in the form of international service learning in Zambia, Africa, enhance critical reasoning skills in occupational therapy students?

3. What is the process of professional development that occurs relative to leadership practices, a growth mindset, and increased confidence for occupational therapy students during an international service learning experience in Zambia, Africa?

### **Study Design**

The mixed methods research design was constructed from the paradigm of pragmatism. This paradigm supports the use of both qualitative and quantitative methods to answer the researcher's questions regarding the phenomenon of professional development during a servant leadership experience in Zambia. Pragmatic designs value the use of both inductive and deductive logic, and the integration of both subjective and objective data findings (Teddie & Tashakkori, 2009). The mixed methods study prioritized the subjective values of the participants and the objective data obtained from pretest and posttest data on cultural competency and critical thinking. The ontology of this mixed methods study was varied and consisted of diverse social viewpoints to explain the professional development process of student occupational therapists. The generalization and transferability of study findings are important to this mixed methods study and were supported by the tenants of the pragmatism paradigm.

This proposed mixed methods study used an embedded design and collected quantitative and qualitative data to understand the phenomenon of international, occupational therapy student professional development (see Figure 1). Embedded designs are supported in health science studies and can allow quantitative data to be integrated into larger qualitative studies to supplement data findings (Creswell & Zhang, 2009). The following mixed methods study consisted of embedding a quantitative methodology into the design to support the findings of the qualitative strand. The graphic image below depicts the role of the qualitative and quantitative strands of data played for the mixed methods study.



*Figure 1.* Embedded mixed methods design.

### **Study Setting**

The mixed methods study took place at both the host university in the United States and in Zambia, Africa. The quantitative data were collected both before and after the 3-week international excursion. The qualitative data were collected at the Home for AIDS Orphans in the village of Mwandi, Zambia. The analysis and interpretation of the data occurred both at the Home for AIDS Orphans and at the university.

The Home for AIDS Orphans is a non-profit organization that is located in the small village of Mwandi. Mwandi, which means “plenty of fish,” is located near the Zambezi River in a rural area that relies on fishing and farming enterprises. Mwandi is a 2-hour drive from the capital of Livingston and has single road access to the village. The rural geography and challenging socioeconomic factors of Mwandi contributed to the limited access of health care services and high prevalence of HIV/AIDs among community members of the village (Catholic Medical Mission Board, n.d.).

The Home for AIDS Orphans also served as an area in which occupational therapy students engaged in living and education occupations during the international servant leadership excursion. The students engaged in daily team building occupations, such as walking two miles for bottled water, and helped with camp maintenance occupations, such as meal preparation and clean-up. The students also engaged in nightly debriefing around a campfire to reinforce reflective practice and planned for the following day's activities by coordinating teams for projects identified in the community.

The education occupations of students while enrolled in OT 590 included education on HIV/AIDs; fabrication of adaptive equipment; home evaluations; low vision adaptations; building/modifications for orphans of HIV/AIDs; participation in resiliency building; and facilitating therapeutic leisure, play, and social occupations. The roles of the occupational therapy students for the excursion were to serve the needs identified by the Mwandi community and to facilitate quality of life and engagement in occupations.

The host university and the Home for AIDS Orphans have been academic partners since 2015, and this was the second international excursion for the organizations. This collaborative partnership has been critical to the development of serving the needs of the Mwandi community and providing an international experience for occupational therapy students. The Home for AIDS Orphans served as the location for the semi-structured interviews, where the confidentiality and privacy of the participants was ensured by completing the interviews in the private lodging of the investigator.

The students enrolled in OT 590 were assigned preparation work prior to the departure to the Home for AIDS Orphans. Preparation work included researching cultures and the values and beliefs of the Mwandi population, in addition to examining natural resources, geography, and

education occupations. The students were also provided with preparation on their roles as servant leaders paired with mentors and mentees and were assigned to research servant leadership in occupational therapy. These activities of cultural preparedness occurred after pre-trip quantitative testing.

### **Study Participants**

Careful considerations were taken as to how the occupational therapy student participants were recruited and selected to participate in this mixed methods study. The characteristics, recruitment procedures, sample size, inclusion, exclusion, and informed consent procedures will be discussed in greater detail in the following text.

#### **Participant Characteristics**

The characteristics of the student participants included Caucasian female occupational therapy students who were studying at a Midwestern, Division II university. All of the student participants were enrolled in OT 590, International Healthcare Study, an elective course for occupational therapy students traveling to Zambia, Africa. Students were recruited to participate in the elective occupational therapy course via a flyer distributed at the university (see Appendix A). The participants were between 20 and 30 years of age. Some of the student participants were first-generation college students, and a few of the participants had never traveled outside of the United States. More than 50% of the participants received some form of financial aid to fund the international course.

Further participant characteristics to highlight are the varied education and experience of the nine students recruited for the mixed methods study. Four student participants had completed one Level II fieldwork and all dyadic MSOT (Master of Science in occupational therapy) course work prior to the study. Three participants had completed one Level I fieldwork and all physical



disabilities and pediatric course content. The third variation of participants included novice occupational therapy students who had completed six 300-level pre-MSOT occupational therapy courses and were preparing for the start of graduate school in the following May. The unique continuum of experience and education of student participants may have influenced data collection, in particular, open-mindedness, which is a critical thinking skill set that often matures with experience and time.

### **Recruitment**

Occupational therapy students enrolled in the International Healthcare Study course were invited to participate in the mixed methods study. Participation was expressed as voluntary and at their own volition. An informational flyer was provided at a scheduled Zambia study abroad meeting (see Appendix B), and the students were encouraged to seek information from the investigator if they were interested in becoming a participant in the study.

### **Sample Size**

Convenience sampling occurred for this mixed methods study. Nine occupational therapy students who were enrolled in OT 590 were offered the opportunity to participate in the study. The students were encouraged to ask questions about the informational flyer during the scheduled study abroad meeting. Voluntary participation was communicated to all students, as well as the risks, benefits, and confidentiality.

### **Inclusion Criteria**

To be eligible to participate in this study, the participants needed to be at least 18 years of age and full-time students during the 2017-2018 academic year. The students also had to be enrolled in OT 590 for the summer semester of 2018. In addition, the students had to be in good academic standing with the university.

**Exclusion Criteria**

Criteria for which the participants were excluded from the study included students who had participated in previous international studies in Africa. Ineligibility criteria for study also included students who were enrolled in international exchange programs in the past, students who were from countries outside of the United States, or students who were on academic probation or had a history of conduct issues.

**Informed Consent**

An informational study abroad meeting transpired in person at the university to explain the international excursion to Zambia and to present the opportunity to participate in the study. This meeting included occupational therapy students enrolled in the OT 590, International Healthcare Study course. These students paid a deposit and planned to participate in the international course. The meeting described the mixed methods research study in detail, including voluntary participation, the purpose of the study, and how the gathered research outcomes will be disseminated to inform the profession. The investigator clarified all risks, benefits, and confidentiality standards of the research project. The student participants were encouraged to ask questions, seek clarification of participant roles, and had the opportunity to discuss the research opportunity at length.

The investigator discussed certification in CITI/human research training and prior experience in conducting international research with occupational therapy students. Each interested student received a stamped copy of the informed consent form by the institutional review board (see Appendix C) to read and was provided with a verbal explanation of the form contents by the investigator. At that time, the participants had the opportunity to ask additional questions about participating in the study. The investigator was responsible for obtaining

informed consent documentation from all of the research participants and later held a voluntary meeting to discuss the purpose of the study for that expressed interest.

### **Data Collection Tools**

The study used quantitative and qualitative instruments to gather data for the mixed methods study. The quantitative instruments included the California Critical Thinking Disposition Inventory (CCTDI) and the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version (IAPCC-SV). Both assessment tools were administered by the investigator in the university's Health and Human Services building.

The CCTDI has been used in occupational therapy and educational literature for measuring the disposition for critical thinking skills in health professional students (Lederer, 2007). The CCTDI has been used to assess the internal motivation of students to engage in critical thinking behaviors in adult college learners and has been used in nursing, physical, and occupational therapy literature to measure educational strategies to improve critical thinking skills in students (Domenech & Watkins, 2015; Lederer, 2007; Velde, Wittman, & Vos, 2006). Lederer (2007) discussed how the CCTDI can be used as a pre-posttest measurement to evaluate occupational therapy programs and the internal drive to gain critical thinking dispositions as future practitioners.

The CCTDI is a 75-item measure that examines seven critical thinking skills that include disposition for truth-seeking, open-mindedness, systematic anticipation for consequences, reasoning, inquisitive thinking toward learning, and mature judgment versus rigid thinking (Insight Assessments, 2018). The instrument developers report high alpha reliability scoring at

0.91 and 0.71 to 0.80 for Cronbach's alpha when considering subscales for each critical thinking skill (Domenech & Watkins, 2015; Lederer, 2007).

Domenech and Watkins (2015) discussed how entry-level physical therapy doctoral programs may want to use the CCTDI to measure the critical thinking habits of students prior to admission to measure the willingness to make important decisions as health care professionals. The authors used the CCTDI as part of a battery of assessments to measure motivation and readiness to engage in critical thinking that is required for practice. The authors found that the majority of the students ( $n = 71$ ) had a positive disposition to think critically and that the CCTDI may serve as a tool to identify students who have the motivation to engage in higher level thinking that is required of them to graduate and pass a licensure examination.

The IAPCC-SV is present in occupational therapy, physical therapy, and nursing literature for measuring cultural responsiveness in student health care professionals. This self-report measure assesses five cultural constructs: cultural awareness, cultural desire, cultural encounters, cultural skills, and cultural knowledge. The IAPCC-SV is comprised of a 4-point Likert scale on which students respond to questions by indicating: *strongly agree*, *agree*, *disagree*, and *strongly disagree*. Student scores on cultural responses are categorized along a continuum of competence ranging from the highest score of culturally proficient to culturally competent to culturally aware, and to the lowest category of culturally incompetent (Fitzgerald, Cronin, & Campinha-Bacote, 2009). The IAPCC-SV is supported by a .783 of internal consistency for reliability.

The collection of qualitative data was supported by grounded theory designs, which can facilitate theory production to inform occupational therapy and occupational science professions (Nayar, 2012). Grounded theory designs are supported by scholars who study critical thinking

and problem-solving skills in health care professionals. El Hussein and Hirst (2016) discussed how constructivist grounded theory designs can help generate theories to understand the development of clinical reasoning in health care professionals that are considered invisible phenomena.

The qualitative data were collected by open-ended, semi-structured interviews that were developed from the principals of the constructivist, grounded theory approach to illustrate the professional development process of the participating occupational therapy students. The grounded theory approach was intended to construct a theory on how social and subjective meaning is derived from the servant leadership in Zambia, which shaped the professional development of the student participants.

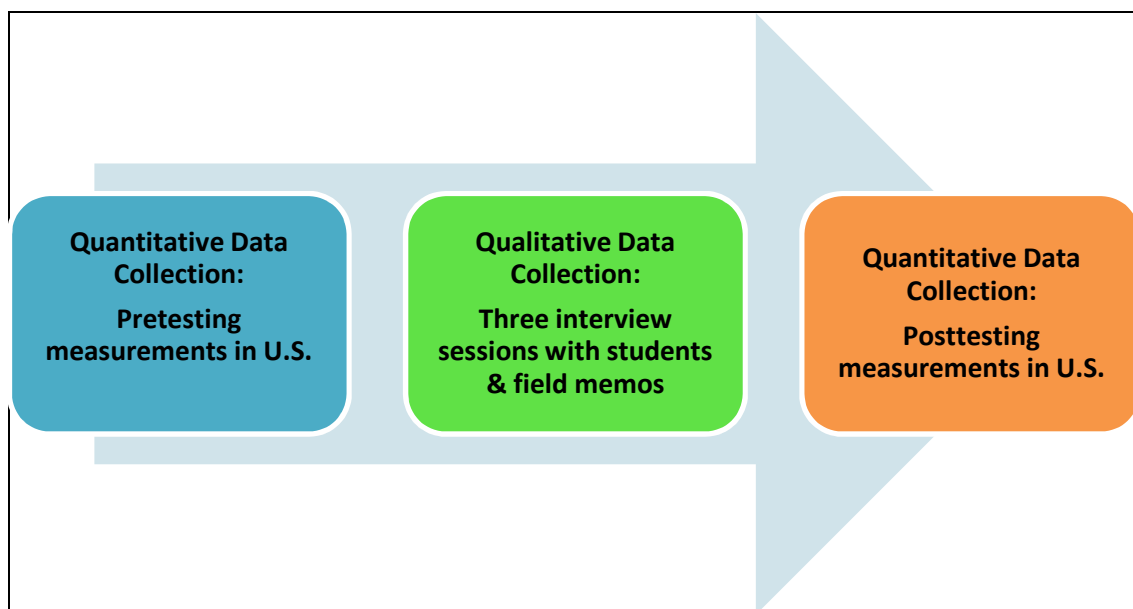
A recent international, occupational therapy study abroad experience by Innes and Stav (2018) helped shape the grounded theory interview questions. The semi-structured questions of the proposed study will encompass topics such as professional development, cultural responsiveness, problem-solving, and servant leadership to better understand the developmental process that occurs while abroad. This rich qualitative data were intended to strengthen the collection of quantitative data gathered on clinical thinking skills that corroborated the mixed methods findings.

Qualitative data were also captured by the use of a field journal to capture impressions, nonverbal behavior, and insights during the semi-structured interviews. Furthermore, qualitative data was captured in a field journal during nightly debriefings around the campfire to gain perspectives of the learning processes that occurred at the group level to capture the process of professional development.

### **Data Collection Procedures**

The data collection for the mixed methods study followed the pragmatic paradigm, which supports embedded mixed methods designs where quantitative pretest data were collected prior to departure. Qualitative data was later collected during the trip, followed by quantitative, posttest data after the conclusion of the trip. Mortenson and Oliffe (2009) discussed how the collection of mixed data offers a two-fold benefit to the occupational therapy profession: to generate theory and to address a complex phenomenon in a single study. Creswell and Zhang (2009) discussed how embedded, mixed methods data provide in-depth qualitative data to enhance the understandings of collected quantitative data findings.

The procedures for collecting qualitative and quantitative data will be discussed to support the mixed methods study in Zambia, Africa. Measurement tools, the semi-structured interviews, and the interview schedule are included in the following data collection information (see Figure 2).



*Figure 2.* Data collection sequence.

### **Quantitative Data Collection**

The mixed methods study used a pre-posttest design to measure changes in critical reasoning and thinking skills of students who participated in a 3-week servant leadership experience in Zambia, Africa, using the CCTDI sample (see Appendix E). Quantitative data was also obtained from pre-departure and post-departure data using the IAPCC-SV (see Appendix F). This study was built on previous studies that examined the effects of experiential learning in occupational therapy and the development of critical thinking skills through service-learning opportunities for students who study in countries outside of the United States.

The CCTDI and the IAPCC-SV were both administered in a quiet classroom, H 277, in the Health and Human Services building at the university. The CCTDI was provided first, in an electronic format on a university password-protected computer. The IAPCC-SV was provided second, in a paper and pencil format. Both assessments took 40 to 60 min for completion. The investigator administered both assessment tools within 3 weeks prior to trip departure and within 3 weeks after the trip.

### **Qualitative Data Collection**

The qualitative data were concurrently collected during the 3-week experience in Zambia, Africa. The student participants were asked to participate in three semi-structured, one-on-one interviews that occurred on Days 5 and 6, 12 and 13, 19 and 20. The participant interviews were staggered over the course of 2 days to provide adequate timing for interviews and to allow for adaptability for schedule changes at the Home for AIDS Orphans. Each interview lasted 30 to 60 min and consisted of informal and open-ended questions. The interview schedule (see Appendix G) included questions about the process of professional development, being a servant leader,

perceived challenges, cultural considerations, and therapeutic use of self. The semi-structured interviews were digitally recorded and transcribed for analysis.

The qualitative data collection and analysis process occurred concurrently to promote a constant comparative interpretation and analysis of findings. This approach was supported by the constructivist, grounded theory approach where analysis takes place both during the collection and analysis of data (Hoare, Mills, & Francis, 2013). This approach allowed for the investigator to identify relationships between codes and to actively compare data findings. This approach supported the development of a substantive theory derived from the professional development that was occurring abroad (Glaser & Strauss, 1967; Nayar, 2012).

A field journal was kept to record memos during and after the semi-structured interviews and nightly group debriefings. The memos captured nonverbal behaviors and contextual influences and supported the development of the ongoing professional development theory that occurred abroad. Field memos were considered to be a form of data that helped foster an understanding of the professional development process that occurred for student occupational therapists.

The constructivist, grounded theory interviews allowed students to reflect on their perceptions, thoughts, and experiences as servant leaders in Zambia. The qualitative questions encouraged elaboration on perceived interpretations of professional development and asked students to characterize their experiences, such as highlights, challenges, leadership experiences, and what they wanted to bring home with them as prospective occupational therapists. The nature of the questions allowed students to go in-depth on their responses in efforts to enable active self-appraisal and self-awareness.



### **Data Analyses**

The mixed methods data followed an embedded design for analysis. Quantitative data collection and analysis procedures were informed by prior occupational therapy literature on cultural competency and the assessment of critical thinking skills in students. The quantitative data answered the questions, “Does servant leadership in the form of international service learning in Zambia, Africa, enhance cultural competency in occupational therapy students?” Moreover, the questions asked if servant leadership in the form of international service learning in Zambia, Africa, enhanced critical reasoning skills in occupational therapy students.

#### **Quantitative Data**

Data was gathered both prior to and after the international experience and was analyzed after the completion of the trip. The quantitative data provided objective data on the professional development processes that occurred abroad and supports the qualitative findings. Data analysis for the pre-posttest data obtained from the IAPCC-SV was scored and imported to SPSS for Windows (IBM, 2017) for statistical analysis with a Wilcoxon signed-rank test to manage the nonparametric, small data sample. A Wilcoxon signed-rank test was used to compare the participants’ pre-posttest scores for the IAPCC-SV and the summative scale from the pre and post administration of the IAPCC-SV was used to determine the change in cultural competency for occupational therapy students during the experience. This method of data analysis has been found in occupational therapy literature to be effective in analyzing data from small samples when using the IAPCC-SV (Keane & Provident, 2017).

The CCTDI data yielded summative pre-posttest data on the dispositional critical thinking skills of the participants. The data will be sent to the publisher at Insight Assessments (2018) for scoring, as a standard practice for this tool. The pre-posttest were further analyzed

with SPSS statistical assessment (IBM, 2017) with a Wilcoxon signed-rank test because of the small sample. A Wilcoxon signed-rank test was used to compare the participants' test scores for the CCTDI assessment tool.

### **Qualitative Data**

The qualitative data was collected and analyzed to be congruent with the constructivist grounded theory principles. The qualitative data answered the question, "What is the process of professional development specific to: leadership practices, a growth mindset, and increased confidence for occupational therapy students during an international service learning experience in Zambia, Africa"? The data was collected and analyzed throughout the duration of the study, which was supported in the occupational therapy literature for grounded theory data collection and analyses procedures (El Hussein & Hirst, 2016; Richards & Morse, 2013).

The study participants maintained a pseudonym throughout the study to ensure confidentiality. The qualitative data was audio recorded, continuously analyzed throughout the study, and later transcribed and coded with NVivo software. The coding strategies followed grounded theory analysis procedures that included open coding of data, memoing, categorizing, and diagramming to illustrate the integration of data (Richards & Morse, 2013).

The construction of a professional development theory was based on the data collected and followed grounded theory approaches for understanding the professional development process of the participants. The principal investigator constructed a model to understand and document major events, challenges, emotions, and perceptions expressed by the participants. These sequenced events were diagrammed to shed light on the trajectory of professional development for each participant (Glaser, 1978; Richards & Morse, 2013).

Each participant transcript was carefully coded line by line. Insights, perceptions, and questions were included in theoretical memos to understand the data findings. Each new concept was compared to previous data to engage in constant comparison of findings (Richards & Morse, 2013). Codes were then developed from the data and were labeled by the language of the participants as they expressed how they coped, developed, and adapted through the servant leadership experience in Zambia. New codes were continually refined as new data was collected and comparisons were made and concepts developed.

Theoretical codes began to develop to represent the data findings as the constant comparison method continued to transpire both during and after the servant leadership experience. This led to the concluding step of coding, as connections were made between several codes and relationships were compared (Richards & Morse, 2013).

Theoretical memos played an important role in the grounded theory data analyses procedures. These memos were in constant expansion, analysis, and re-evaluation as the investigator compared theoretical memos to the coded data (Richards & Morse, 2013). Theoretical memos and codes continued to develop as the primary investigator further identified, coded, and categorized findings to develop a theory on the professional development process of the participants. At this stage, the integration of qualitative data begins to emerge to tell a story (Richards & Morse, 2013).

Core categories emerged from the data and primary themes began to depict the professional development process that unfolded in Zambia. Core categories were central to the data findings and occurred throughout many data codes in a consistent manner in an open coding fashion (Glaser, 1978). A professional development theory was developed from these core categories as open coding depicted the grounded theory data. Selective coding then occurred as

data was diagrammed to illustrate the data findings and a theory generated (Richards & Morse, 2013). Member checking occurred both face-to-face and virtually with four out of nine participants to confirm the data findings and interpretation of emergent categories.

### **Integration of Data**

The integration of quantitative and qualitative data followed an embedded mixed methods design. Both quantitative data and qualitative data were collected and analyzed separately and then compared and mixed to understand the phenomena of professional development that occurred for occupational therapy students after a servant leadership experience in Zambia. The quantitative pre-posttest data illustrated findings that supported the larger design of qualitative data findings on the phenomena of professional development. The quantitative data corroborated the qualitative data and provided greater details on the acquisition of professional development skills, such as critical thinking and cultural competency. The qualitative data followed a constant comparative analysis schedule of both interview sessions and field journal memos with the NVivo software to generate the development of a professional development theory.

### **Design Rigor and Strength**

The following procedures supported the guiding tenets of pragmatism for mixing qualitative and quantitative data for analyses. The pragmatic paradigm allowed for the mixing of qualitative and quantitative data to explore the new phenomena and to support deductive and inductive thinking and understanding of the mixed subjective and objective participant data (Teddie & Tashakkori, 2009). The following strategies were used to ensure the validity and reliability of the embedded, mixed methods study.

## **Trustworthiness**

Trustworthiness of the mixed methods study was ensured by infusing four components of credibility, transferability, dependability, and confirmability into the study. Credibility was achieved by collecting data over the duration of 3 weeks and completing three, 30 to 60-min interviews with each participant. The principal investigator engaged in a constant comparison of the data as it was gathered and later confirmed with the participants to safeguard the accuracy of the findings. Moreover, the investigator engaged in taking memos with a field journal as data was collected. This reflective strategy helped alleviate bias, kept the data grounded, and strengthened the findings (Barker et al., 2010; Charmaz, 2006; El Hussein & Hurst, 2016).

Transferability of the grounded theory study was considered a high priority. This mixed methods study was designed with the intention to be replicated in future occupational therapy studies. This constructivist approach has followed the grounded theory design by Glaser and Strauss's (1967) framework and was built on previous occupational therapy literature. This study can facilitate the development of other international research studies on international fieldwork, international coursework, or other servant leadership opportunities.

Dependability of this study was ensured by the completion of an audit trail to illustrate the process of data collection, analysis of findings, and the interpretation of data. Furthermore, a peer review process transpired to ensure the validity of the data procedures and to generate theory development. A peer review editor strengthened the confirmability of the data findings (Letts et al., 2007).

Confirmability of the data findings was an essential component of trustworthiness in this mixed methods study. The investigator engaged in the conscientious examination of prior international travel and reflectively scrutinized the role as an investigator to enhance the

accuracy of the data collection and analysis (Barker et al., 2010; Charmaz, 2006). The confirmability of the findings were verified by the participants to certify that correct themes were identified by the investigator. The participants were met with and emailed to review core theoretical themes identified and were asked to confirm the themes for accuracy.

### **Reliability**

The production of quantitative data provided support to the theory generation on the professional development processes that occurred while immersed in Zambia, Africa. It was hypothesized that changes would occur for occupational therapy students in areas of development, such as cultural competency, problem-solving, and critical thinking skills. The pre-departure and post-departure testing provided a baseline to measure changes that occurred in the student participants. Both the CCTDI and the IAPCC-SV have been found in occupational therapy literature to be reliable and valid. These two assessments tools have not been used in tandem to measure professional development outcomes in previous literature, and their use substantiated the qualitative findings.

### **Ethical Considerations and Review**

This study received approval by the university's institutional review board (see Appendix I), in addition to approval from the investigator's university for a testing site (see Appendix J). Furthermore, the study site at the Home for AIDS Orphans provided approval for a testing site (see Appendix K) and permission for completion of the mixed methods study.

### **Potential Risks**

There were several low-risk factors associated with the mixed methods study. Psychological stress was identified as a potential risk as students dialogued about their learning in Mwandi, Zambia. Semi-structured interviews could have evoked feelings of cultural tension

and frustration as the participants explored and reevaluate their values and belief systems. The students could have experienced feelings of loneliness or homesickness.

Additional psychosocial stressors could have surfaced as the students shared their anticipated roles as occupational therapists. This qualitative data could have facilitated feelings of anxiety and stress due to the participants' increased awareness of diversity and adverse thoughts of enculturation. It was probable for the research participants to experience mild psychological stressors while participating in this mixed methods study. This posed minimal risk and discomfort, as the students gained a heightened awareness of cultural and social differences.

The research participants were at legal risk for a breach of confidentiality. All standard precautions were taken to minimize these risks and to prevent a break of confidentiality. This risk of confidentiality breach was minimal. Feelings of mistrust could have arisen as the students disclosed personal identification, such as names, and subjective content about their experiences as the research participants.

### **Precautions for Risks**

To decrease the occurrence of adverse effects of this study, the investigator employed close monitoring of the emotional, social, and psychological well-being of the participants. The students were informed that referral sources with the university student counseling center would have been made for phone consultations with the use of the investigator's phone. The participants were supported and encouraged to ensure adaptive coping was occurring for all of the research participants. The investigator also reinforced the social supports in the group and restated the common mission to learn, serve, and work together as a health care team in Mwandi, Zambia.

**Benefits**

Participation in this mixed methods study had the potential to enhance the participants' personal and professional development as prospective occupational therapists. The research participants gained greater cultural competency, sensitivity or responsiveness, and, in turn, developed a deeper appreciation for the customs and traditions that held meaning for others. This experience translated into the development of therapeutic use of self that is essential for developing an effective rapport with future clients that will improve their overall occupational performance as future practitioners.

This study also had the potential for the research participants to gain critical thinking and reasoning skills to create or adapt client-centered treatments with limited resources. This experience had the potential to translate professional and intellectual growth for future occupational therapists.

**Resource and Funding Needs**

The resources required for dissemination of the mixed methods results included peer-review edits systems, publishing guidelines, and maintained consent from the participants for sharing the results of the study.

The investigator did not receive any form of funding for this study or financial gain from any organization. The student tuition and fees for the study abroad course covered the cost of airfare and lodging. The Office of International Study supported the coordination and payment of all international accommodations, including flights, lodging, travel liability, and insurance.

**Summary of the Chapter**

The proposed mixed methods study was supported by the tenets of the pragmatic paradigm to illuminate and generate occupational therapy findings on cultural competency,



critical thinking, and learning processes that occurred for the students while immersed in Mwandi, Zambia. Furthermore, this study supported the generation of theory development by using a constructivist grounded theory approach to collect and analyze qualitative data. This collection of data considered the investigator's experiences, prior knowledge, and values for the design and analysis of data (Barker et al., 2010; Charmaz, 2006). The mixed methods study was intended to support the literature of the occupational therapy profession to guide theoretical development and international learning and to empower entry-level practitioners to meet the global needs of society.

## **Chapter 4: Results**

This chapter will discuss the findings from the mixed methods study, the experience of participating in an international servant leadership, and its effect on cultural competency and critical thinking. This chapter will report the quantitative data derived from pre-posttest data from the CCTDI and the IAPCC-SV. This chapter will also illustrate the findings from the grounded theory qualitative strand of the study, which emerged from the interviews and field notes collected during this study. The qualitative data analysis procedures will be presented by including participant demographics, themes that emerged from constructs, and a model to illustrate the process of professional development of critical thinking and cultural competency during an international service learning experience. Finally, the concluding phase of analysis includes the mixing of qualitative and quantitative data to gain a holistic understanding of the professional development process that occurred for student occupational therapists who participated in a 3-week servant leadership experience in Zambia, Africa.

### **Participant Demographics**

Nine occupational therapy students participated in the mixed methods study. Four of the students were in their third year of coursework and in the process of completing their Level II fieldwork rotations. Three of the occupational therapy students were in their second year of MSOT coursework, and two students were completing 300-level undergraduate occupational therapy courses in preparation for the university's 3 + 2.5 MSOT program. The study participants ranged between 20 and 28 years of age, and 100% of the participants were female. The ethnic makeup of the group was Caucasian, and four of the nine students reported being first-generation college students.

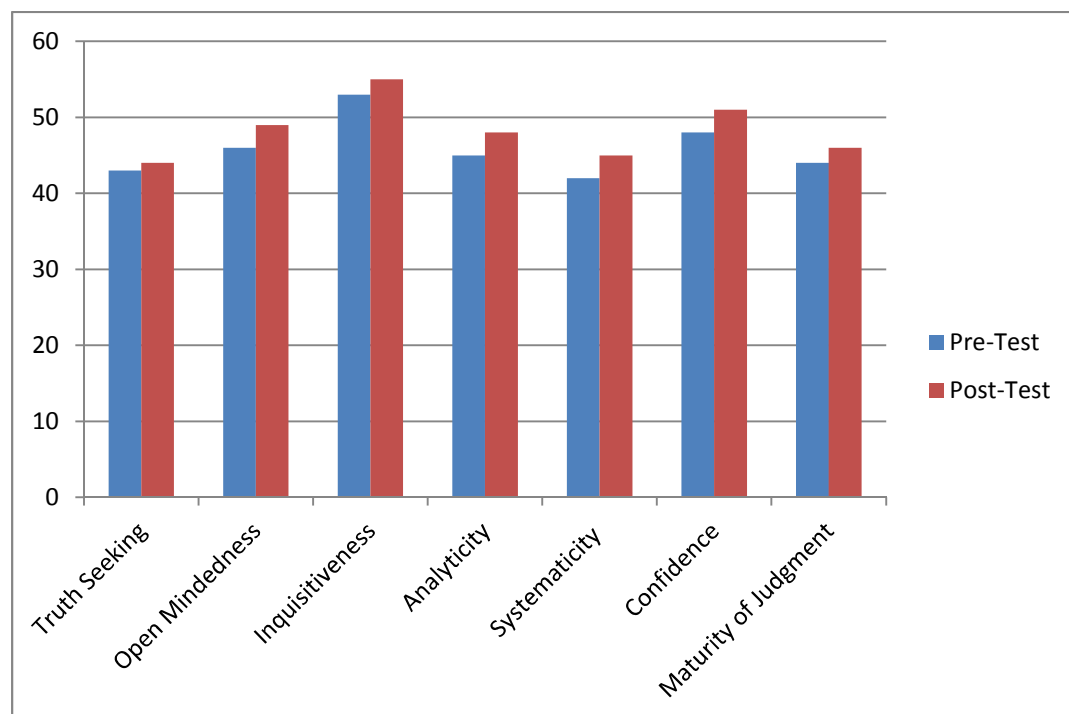
### Quantitative Data Analysis

The nine occupational therapy students participated in two pre-posttest before and after the immersion in Zambia, Africa. The pre-posttest data for the CCTDI was sent to the publisher at Insight Assessments of Mellbrae, CA. The pre-posttest were further analyzed with SPSS statistical assessment (IBM, 2017) with a Wilcoxon signed-rank test to manage the nonparametric data due to the small sample. A Wilcoxon signed-rank test was used to compare the participants' pre-posttest scores for the IAPCC-SV and CCTDI with SPSS software.

#### The CCTDI Results

The CCTDI was used to assess the disposition of the student participants to answer the research question, "Does participation in a supervised international immersion experience increase critical thinking among occupational therapy students?" The results of the assessment illustrated statistically significant increases in the disposition to think critically. The following seven constructs of critical thinking were assessed as part of the CCTDI: truth-seeking, confidence in reasoning, open-mindedness, systematicity, analyticity, maturity of judgment, and inquisitiveness. The pre-posttest results indicated a statistically significant increase in the overall median scores from *Mdn* 312 to 340 *Mdn*, where  $Z = 2.31$ ;  $p = .011$ , representing a medium effect size  $r = .48$ . However, recent literature by the publisher indicates a composite score will often misrepresent large and small changes in individual scores and that measuring composite CCTDI scores of a sample is not recommended. The best practice for measuring critical thinking disposition with the CCTDI measurement tool is to analyze the individual constructs measured in participants in efforts to examine change to critical thinking mindsets (Domenech & Watkins, 2015; Insight Assessments, 2018). A comparison of median pre-posttest scores of each of the constructs revealed increased scores for each construct. Figure 3 shows the comparisons of the

CCTDI construct pre-posttest scores. The possible range of the CCTDI scores for student participants is 10 to 60.



*Figure 3.* Comparison of the CCTDI pre-posttest scores.

The analysis of the pre-posttest scores revealed statistically significant increases in the CCTDI composite scores in all but one construct. The study participants demonstrated an increased truth-seeking, which is the participants' ability to understand a situation based on evidence rather than on preconceived notions and to reason critically (Insight Assessments, 2018). The international service learning experience resulted in students being more open-minded, which is operationalized by the ability to have a pluralistic mindset, or the ability to have tolerance of diverse viewpoints or different cultural beliefs of individuals (Insight Assessments, 2018). The participants were more inquisitive following the experience, as they had a higher tendency toward intellectual curiosity to gain new knowledge and actively seek

learning opportunities (Insight Assessments, 2018). The participants demonstrated an increased ability to habitually anticipate outcomes and to critically adapt to what may occur next in a situation, as measured by significant analyticity scores. Participation in this international experience also resulted in improved systematic or organized problem-solving and discipline for strategic problem-solving (Insight Assessments, 2018). The last area of improvement for the participants was confidence in reasoning, which is the internal ability to engage in reflective thinking in problem-solving tasks (Insight Assessments, 2018). The only area of critical thinking that improved without reaching statistical significance was maturity of judgment, or the ability to perceive complex issues that extend beyond dichotomous thinking patterns in a timely manner (Insight Assessments, 2018).

The pre-posttest median scores further indicate a median effect size for the CCTDI composite scores for truth-seeking, inquisitiveness, analyticity, systematicity, and confidence. Open-mindedness and maturity of judgment had a small effect size. Table 1 shows the median pretest scores, posttest scores,  $Z$  value,  $p$  value, and  $r$  effect size.

Table 1

*The CCTDI Pre-Posttest Scores*

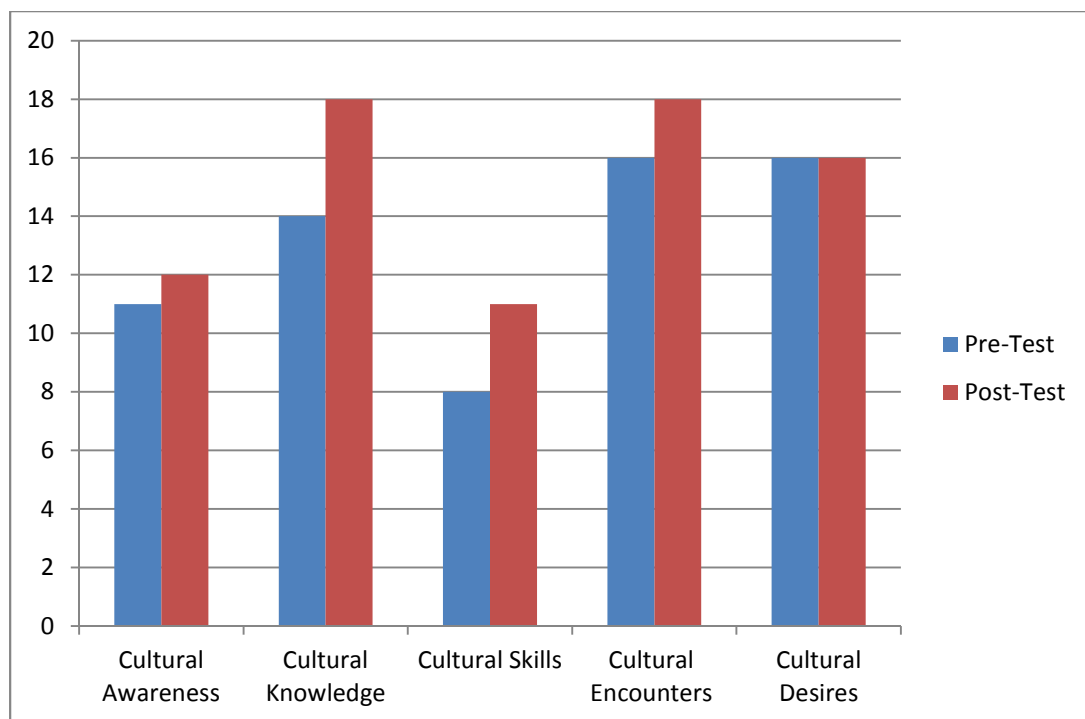
Construct	Pretest Median	Posttest Median	Z Value	p value	Effect Size ( <i>r</i> )
CCTDI Composite	312	340	2.31	.011*	.48§
Truth-Seeking	43	44	2.77	.019*	.31§
Open-Mindedness	46	49	1.68	.045*	.22
Inquisitiveness	53	55	1.89	.029*	.32§
Analyticity	45	48	1.66	.048*	.31§
Systematicity	42	45	2.34	.021*	.34§
Confidence	48	51	2.52	.006*	.47§
Maturity of Judgment	44	46	1.69	.054	.28

*Note.* \*connotes a statistically significant change between pretest and posttest scores at the  $\alpha = .05$ . § connotes a medium effect size. Open-Mindedness and Maturity of Judgment had a small effect size.

**The IAPCC-SV Results**

The IAPCC-SV was used to assess cultural competency and to answer the research question “Does participation in supervised international immersion experiences increase cultural awareness among occupational therapy students?” The results of the IAPCC-SV indicated

statistically significant median increases in cultural competency scores. The IAPCC-SV measured the following cultural competency constructs: awareness, knowledge, desires, skills, and encounters of the student participants after the international servant leadership experience to Zambia, Africa. The 20-item IAPCC-SV was comprised of the constructs of cultural competency based on the Camphine-Bacote (2007) theoretical model, The Process of Cultural Competency in the Delivery of Health Care Process. The five constructs of cultural thinking were assessed by composite scores in terms of levels of competency, including cultural proficiency, cultural competence, cultural awareness, and cultural incompetence (Transcultural C.A.R.E. Associates, 2018). The pre-posttest results indicated a statistically significant increase in the overall median scores from *Mdn* 63 to *Mdn* 76, where  $Z = 2.549$ , and  $p = .006$ ,  $r$  representing a very large effect size. Figure 4 illustrates the pre-posttest scores. The possible range of the IAPCC-SV scores for the student participants range from 20 to 80.



*Figure 4.* Comparison of the IAPCC pre-posttest scores.

The analysis of the IAPCC-SV pre-posttest scores revealed statistically significant increases in the composite scores in addition to all five constructs of cultural competency. Occupational therapy student participants demonstrated increased cultural awareness, or the ability to be intentional and self-aware of personal bias and prejudice held about others (Fitzgerald, Cronin, & Campinha-Bacote, 2009). The IAPCC-SV results illustrated that the student participants demonstrated greater cultural encounters, or the ability to seek out interactions with individuals from diverse backgrounds to cultivate a deeper understanding of a cultural group. The participants also demonstrated increased capacity for having cultural knowledge in the pretest and results. The cultural desires construct was also statistically significant, which measured the participants' motivations to be culturally responsive in health care behaviors. The IAPCC-SV further demonstrated that the students had increased cultural skills to gather sensitive data and to perform culturally meaningful assessments with clients



(Camphine-Bacote, 2007). The pre-posttest data further illustrated a very large  $r$  effect size on the IAPCC-SV composite scores and the cultural knowledge scores of the participants. The data illustrated a large  $r$  effect size on the median scores for cultural awareness, cultural skills, and cultural encounters. A medium  $r$  effect size was found for the cultural desires construct. Table 2 indicates composite scores and five cultural construct pretest scores, posttest scores,  $Z$  value,  $p$  value, and  $r$ , the effect size.

Table 2

*The IAPCC-SV Pre-Posttest Scores*

Construct	Pretest Median	Posttest Median	Z Value	p value	Effect Size (r)
IAPCC Composite	63	76	2.549	.006*	.71#
Cultural Awareness	11	12	2.64	.004*	.66@
Cultural Knowledge	14	18	2.52	.006*	.75#
Cultural Skills	8	11	2.53	.005*	.61@
Cultural Encounters	16	18	2.20	.014*	.51@
Cultural Desires	16	16	1.85	.031*	.44§

*Note.* \*connotes a statistically significant change between pretest and posttest scores

at the  $\alpha = .05$  level. # connotes a very large effect size; @ connotes large effect size;

§ connotes a medium effect size.

### Qualitative Findings

A depiction of the professional development process is the substantive grounded theory that was derived from the qualitative data that illustrated the process of growth occupational therapy students experienced after an international servant leadership experience in Zambia, Africa. The professional development process explains the transformation that occurred for students who participated in a 3-week excursion in the resource-deprived and culturally rich country of Zambia. The professional development theory emerged from an analysis process that

involved constant comparison of initial data codes, which were further organized in the following categories: use of self as a change agent, critical and cultural thinking changes, confidence as servant leaders, gained leadership skills, and the importance of occupational therapy advocacy. These categories were further refined into the following themes: resilient occupational therapy lens and empowered occupational therapy students. Table 3 indicates the process of coding that developed into main categories, themes, and the final outcome, which was the substantive grounded theory of the qualitative data findings.

Table 3

*Qualitative Analysis Findings*

Codes	Categories	Themes	Outcomes
Use self as a therapeutic tool			
Lack of resources for therapy			
All you need is yourself versus adaptive equipment			
Importance of adaptability			
Build rapport	Use of Self as Change Agent		
Use of nonverbal communication			
Become an agent of change			
Therapeutic use of self-sparks creativity			Professional Development
Cultural responsiveness integral to therapeutic use of self			
Changes in thinking patterns			
Adapting to different cultural values			
Evaluate occupational performance holistically		Resilient OT Lens	
Extend beyond western occupational therapy lens	Critical Thinking Changes		
Critical observation versus equipment use			
Think quickly to adapt to client's needs			

Codes	Categories	Themes	Outcomes
Problem-solve through language barriers			
Immersion changes cultural schemas			
Experience as minority grows cultural awareness			
Motivation to be culturally responsive grows			
Increased awareness on cultural differences	Cultural Thinking Changes		
Appreciation of immersion			
Maslow's Hierarchy of Needs is universal across cultures			
Gained diverse occupational lens			
<b>Day 5: Low</b>			
Confidence accelerates after watching OT mentors			
Importance of OT mentor/mentee relationships			
<b>Day 12: Growing, Gained occupational lens</b>	Confidence in Servant Leadership Abroad and Home	Empowered OT Students	
Learning through doing			
Coping by observing older OTs			
Leading mentees becomes a natural process			Professional Development

Codes	Categories	Themes	Outcomes
<b>Day 19: Confident</b>			
Confident and eager to serve			
Confidence in leader capacity after Zambia			
Confidence to advocate or OT in developing countries			
Confidence extends into personal and professional lives			
Value in leading by example versus loud voice			
Lead with cultural lens			
Advocacy to be culturally inclusive			
Importance of client-centered care			
Value in unique occupational lives of clients, beyond textbook			
	Gained Leadership Skills		
Value of self-care to be effective leader			
Increased desire to serve others			
New worldwide lens for leadership			
Need for OT advocacy is universal			
Need for OT recognition in Zambia			
	Importance of OT Advocacy		

Codes	Categories	Themes	Outcomes
Educate other professionals on OT's role			
Need for inter-professional practice			
Advocate for holistic care versus medical model abroad			

### **Emergent Themes**

The qualitative data derived from the 3-week immersion experience worked to answer the research question “What is the professional development process for occupational therapy students participating in an international learning experience?” The data illustrated there was a positive professional development process that transpired during the servant leadership experience, which led to increased cultural competency and critical thinking skills and ultimately to the two emergent themes: a) resilient occupational therapy lens and b) empowered occupational therapy students. Each theme will be presented with the definition and representative quotes to illustrate the participants’ perspectives. The students’ names have been changed in the following excerpts to ensure confidentiality and to illustrate qualitative data findings.

### **Resilient Occupational Therapy Lens**

The qualitative strand of the study revealed the students developed a resilient occupational therapy lens for the transformational change in thinking patterns that required the use of oneself as an agent of change and critical and cultural thinking changes while fulfilling the role of servant leaders in Zambia, Africa.

A resilient occupational therapy lens was derived from a servant leadership experience because of the harsh contextual factors encountered during the servant leadership experience. The Mwandi village is nestled in rough African terrain that is not easily accessible from the United States. Travel to the village required three plane rides and nearly 32 hrs of travel to arrive to Livingstone, Zambia, and another 3-hour commute by bus over badly deteriorated dirt roads. A lack of government support and alleged corruption contributed to the basic infrastructure for roadways, electricity, and street lighting in rural Zambia (P. Van Zyl, personal communication, August 8, 2018).

Further contextual challenges that were a stark contrast from the westernized occupational therapy contextual milieu were the absence of basic amenities, such as running water, electricity, and bathroom facilities. Two students experienced dehydration, as clean drinking water required purchase and transportation to clinic sites. Planning for daily water consumption required students to walk 2-miles into the Village of Mwandi to purchase bottled water from local vendors.

The risk of malaria was low during the dry season in Mwandi; however, it required students to sleep under bug nets and exercise extreme caution with insect bites. One student had an allergic reaction from her oral anti-malaria medication, and another student battled bilateral ankle insect bites that were severely edematous and weeping. Despite the harsh conditions, the students found value in their servant leadership, as expressed by Annette, who shared her gratitude: “This will change our lens, our everyday life; it will spill over to our personal life, to be thankful for what we have.”

The student participants also faced a language barrier and a general lack of translators to negotiate cultural and social barriers. Routine access to medical documentation, adaptive



equipment, and simple interpersonal communication exchanges were considered luxuries that did not exist in the rural bush country of Zambia. The students had to adapt to the resource-deprived context and use themselves as agents of change to connect with individuals to assess clients, implement occupational therapy interventions, and overcome language barriers. Claire, a second-year student, shared how she negotiated the language barrier: “It’s you as the therapist who determines how to use yourself. With a language barrier, you really have to use your therapeutic use of self and therapeutic use to touch. I’ve developed a lot more confidence in using myself.” Arianna discussed her gained ability to develop rapport, which would later shape her role as a clinician:

To establish rapport on a different level, to be more holistic, it helps with therapeutic use of self. I think this will help me in my next fieldwork rotation and when I become an OT, to be able to use the traits I learned on this trip. This will help me to provide good therapeutic use of self to others and be an agent of change. I feel like after I graduate I want to work with whatever population that I can and be the best OT that I can.

The resource-deprived environment in Zambia facilitated the development of a resilient occupational therapy lens through the employment of critical thinking skills. Belle commented on her adaptation when deprived of assistive devices: “You don’t need a lot of tools to be a good therapist. Do with what you have, that has been reinforced here, become aware of who you are working with, then using what you have within yourself to help them.” Quinn perceived the lack of equipment as a means of developing her creative thinking skills in finding ways to enhance her occupational therapy intervention plans: “It has also helped me to be more creative when developing treatment plans, using resources in my environment. I don’t feel as though I need to have a lot of supplies to come up with something meaningful and purposeful.”

This resilient lens developed from the participants' strategic use of self for developing rapport and connecting with clients from a culture that was diverse from their own. Lona explained this change as, "It's easy to relate to someone who speaks the same language as you, but therapeutic use of self is diving past what relates you and learning more about them." Natalie also depicted the use of herself when working with clients from diverse cultures:

I have learned more about the importance of my therapeutic use of self, especially when working with clients from different cultures. As a therapist, it is my duty to figure out what therapy method will work best for clients, which I realized while in Africa. Some clients from a different culture have different priorities since they may need more basic needs covered first. Also, some clients may not be able to understand verbal communication due to a language barrier or have decreased vision. While in Zambia, I have experienced both of these situations and learned how to use myself as an agent of change.

The qualitative data demonstrated how a 3-week immersion can lead to meaningful changes of student participants to gain a holistic lens when performing occupational therapy assessment and interventions. Ariel commented on her enhanced ability to think critically as she related this experience to her prior fieldwork experience:

I think deeper and not at the surface. I think deeper here (in Zambia) because you have so much to consider, culture, language, etc., to look at the whole picture. You have to problem-solve on what to say, what to do, and to think deeper and more holistically. I can't focus on one problem, because that is not going to make anything, it won't make them a better person. This experience and fieldwork has helped me step back and grow.

Stephanie also discussed how her thinking patterns evolved out of necessity while immersed in rural Zambia. She discussed how these changes shaped the process of her becoming an occupational therapy clinician:

My problem-solving skills have changed, adapting to different cultures, different time zones, actually adapting and being flexible in the moment. I think that's part of learning how to be a clinician, and how to interact in a work and everyday environment, and these skills will help broaden our perspectives.

Jessica shared a similar change in her thinking patterns and how she learned to adapt to clinical challenges:

It's also not a clinical perfect world, you have to be adaptable. You cannot rely on replicated treatment learned in school, but you have to adapt to the needs of your client, here and in the US. There are a lot of changes in my problem-solving and critical thinking.

The ability to overcome a language barrier was a strong contributing factor that facilitated that development of a resilient occupational therapy lens among the student participants. Adaptation to language barriers required in-depth critical and cultural thinking skills to communicate effectively with clients from Zambia. Lona commented on her perceived critical thinking changes after learning how to negotiate language barriers: "Language is a big deal. You can't ask about psychosocial factors, or the occupations they enjoy, or anything. So, we imitate a lot, so that's really hard. But a smile is universal." Ariel corroborated Lona's comments on the difficulty with a language barrier, as she described her experience in reading nonverbal behavior: "the language is the biggest thing here, but everyone smiles and laughs in the same language.

You have to watch for grimacing while stretching.” Jessica remarked on her self-awareness to be culturally conscious of how she used her non-verbal language when working with clients:

I am a lot more aware and respectful, because any type of hand gesture maybe offensive, or what you eat, or how you drink water, with or without a filter may be offensive, but now I am more polite in how I say no, or how I use language.

Danielle described her experience in working in a rural clinic and how she negotiated the language barrier to remain therapeutic with her client:

We have to use a lot more nonverbal communication and body language and facial expressions. When in the clinic, I was doing height and weight of women who were pregnant and some didn’t understand me, so I couldn’t guide them verbally. I learned to use therapeutic touch, and building rapport in a short amount of time.

Many of the student participants remarked on changes to their thinking patterns that contributed to a resilient occupational therapy lens for assessing culturally inclusive occupational engagement in community members. Lona depicted her shift in clinical thinking and resilient occupational therapy lens:

This trip is beyond the medical model and will help scratch the surface, or dig into the surface to help us understand the meaning or purpose of this trip. Our job is to help people, help themselves to do what they want to do. Everything we are doing here is helping people to help themselves to accomplish what they want. To help them use what they have, to be more successful and (we’re) not trying to change them or change who they are. But to use what they have to do what they want, to help them go further than what they have.

Lauren also described her changed occupational therapy lens when she shared,

I gained cultural experience in how to treat a patient and not thinking about what I want to do for a patient, but thinking about what they want to do. To be flexible and understanding that they might see things differently than what I would.

Elle illustrated how the servant leadership immersion facilitated her self-awareness and lens to become a culturally responsive occupational therapy practitioner as she described her learning process:

I didn't realize I had so much to learn. We talk about cultural competence, and using yourself as a therapy tool, but you don't really know until you're out in a different setting. Even in class that we can pretend and role model back-and-forth, but it's not the same until you actually get into one of these settings.

The emerging theme for resilient occupational therapy lens also evolved from the participants' new perspective on being a minority, and how they gained a deeper understanding of cultural differences. The students also gained awareness of how basic physiological needs shape engagement in meaningful occupations. Claire described her gained perspective as "Clients from a different culture have different priorities since they may need more basic needs covered first." Lona realized that despite cultural differences, she was more alike than different from her clients in Zambia: "After being here for three weeks and talking to people who don't speak English, shows you how similar we are, and how much we are the same." Elle commented on her growing cultural lens: "We can learn so much from a book, but until you immerse yourself in a culture, you don't fully understand what life is like."

### **Empowered Occupational Therapy Students**

The qualitative data illustrated the emergent theme of empowered occupational therapy students as participants adapted to environmental, social, and political challenges to meet the

inclusive needs of community members in Zambia. Empowerment was experienced as student occupational therapists transformed from low confidence at Day 5, to growing confidence at Day 12, to an empowered state of confidence at Day 19. The students exemplified their confidence, as the group unanimously identified the importance of occupational therapy advocacy and the inclusion of the profession in the developing country of Zambia.

Initial data obtained by one-on-one interviews illustrated that students displayed varying amounts of confidence depending on their occupational roles assumed in the MSOT program. There was a consensus on having low confidence for Pre-occupational therapy students and growing confidence for second- and third-year MSOT students during the first interview on Day 5. Danielle, a novice occupational therapy student, reported her confidence was, “low, but it’s growing after watching other OT students.” Elle, a third-year student, depicted her confidence for working with limited resources as:

I feel relatively confident coming from my level 2s. I can do this. I’ve been thinking of things with limited resources, but haven’t tried it yet. I’m relatively confident, but have not put it into practice yet, maybe I have a false sense of confidence? I feel relatively confident, maybe a 6 or 7 out of 10 if I had to rate it.

Student mentor and mentee relationships contributed to the theme of empowered occupational therapy students as mentoring relationships emerged from the experience and were integral to students’ perceptions of success. Kathryn described her mentee experience:

I think watching the girls who have already been through the program helps, I kind of relate to the observation hours. I started making connections, I am going to use this when I’m in the field, so I think method wise, I’m starting to build an understanding of what you do, and why you do it.

Belle, an occupational therapy mentor, who is also a third-year student, remarked on leading novice occupational therapy peers and reflected on her future role as a clinician:

I'm trying to be a good leader by leading by example, but you don't know if you're making a difference. Not many clinicians have the opportunity to go to a developing country; how can I use my knowledge to help others?

Growing confidence emerged on Day 12 of the interviews across the entire of group of student participants. The students gained greater self-esteem and self-efficacy for working with clients from cultures diverse from their own. Ariel reported, "My confidence has grown so much while being here. I think that comes with learning more, you feel more confident in yourself." Claire also remarked on her confidence: "I'm a lot more confident, coming into this I had no idea what to expect." Hannah, a novice occupational therapy student, depicted her confidence as being a challenging experience: "The only challenge I've experienced is not being as experienced as the other OT students. One way I have been coping is watching them, and to learn as I go."

The student mentors demonstrated greater empowerment at leading novice students, which became a more natural process across the 3-week experience. Kennedy remarked on her growing leadership skills:

I have grown as an OT leader; I've become more confident in my skills. I think a lot of times when you're helping younger OT students; you don't think about leading them, it becomes an unconscious thing after three weeks. I've become a more natural leader, that's what this trip helped me do.

Third-year occupational therapy students also discovered increased confidence for leading their mentees. Maria discussed how leading can be both a rewarding and difficult endeavor as she described her gained leadership skills:

This trip increased my leadership practice, with other undergraduate students in the program, and learning the broadness of OT. To help them understand what we do, that's a part of leadership. I've tried to be a leader outside of the classroom, in everyday life, and this study and experience helped me to become more of a servant leader in Zambia, and in Botswana, and every place we went, with the people we are with. It's hard to leave some bias behind, but you have to be your best self. Sometimes I think the more assertive leaders are hard to get along with, like the KAWA River Model; there are a lot more rocks with assertive leaders, less river flow.

Sarah also remarked on how she experienced greater confidence and empowerment at Day 19 by working with occupational therapy student mentors:

I was very prepared, especially being around 3rd years who are in practice, who are fresh out of OT classes, they made me more confident. I feel like when I go back to school, I'll have a feeling about therapeutic use of self, cultural differences, my confidence and leadership has improved.

Ariel discussed how she learned to become a servant leader and the importance of leading by example versus being the loudest voice:

I've grown a lot. You don't have to have the loudest voice to lead and to have people follow you. You can be quiet and lead by example and people will want to follow what you're doing. It took me this trip to learn about that. With such a big group and big personalities, you don't have to be the loudest or biggest leader. Sometimes there are



people who don't step up and you have to, but then there are other times when too many people are stepping up and it's time to step back. It's about being able to read that in bigger groups.

Motivation to become a servant leader contributed to the theme of becoming an empowered occupational therapy student. Jessica commented on her motivation to become a servant leader and how her newly-gained resilience was developed through making mistakes:

People are afraid of making mistakes, but this is the time to learn. That's why I came out here, to push myself, that's the reason why I did this. If my first out of the country is Africa, I can do anything.

Elle also illustrated greater empowerment as she depicted her personal motivation to serve the needs of others, which included helping people achieve their greatest potential: "This trip has inspired me to want to help people we met along the way, to reach their potential and achieve their dreams."

A theme of empowerment for occupational therapy students also derived from an increase in overall leadership skills from the one-on-one interviews and field notes. Lona remarked that her ambition to lead has "has increased my desire to help make a change, even if it is just one life at a time." Empowerment led to becoming culturally inclusive, gaining a culturally diverse lens, and finding a careful balance of self-care as a leader. Arianna reported, "I've grow personally to be more flexible, to work in groups, to step back and to step forward when needed. Just knowing when to be there as a leader and when to be a listener." Elle illustrated empowerment as she learned to overcome anxiety when leading others, as she described her new perspective:

If I'm thrown into a situation now, I'm going to do what I think I should do. I was nervous about not planning everything before this trip, but I'm not anymore. I'm more able to go with the flow. You can't change other people, but you can change how you are, and the way you lead. If you do the right thing, people will follow your lead if they want too.

Maria also echoed similar sentiments in how she became empowered to overcome personal anxieties when serving the needs of others:

It's always problem-solving within yourself, even if you're anxious about the treatment or anxious about getting someone up. It's always like, well how can I problem-solve through my own anxieties? How can I overcome what's limiting me, so I can be the best therapist? I think that's a huge part of coming out here for me is overcoming my anxiety and learning how to be the best therapist I can be.

Empowered occupational therapy students also articulated the universal need for occupational therapy advocacy in Zambia, Africa. Occupational therapy was not recognized in the small village of Mwandi or the rural bush clinics of Zambia. Some community members traveled for more than 2 hours to visit student and faculty-run clinics, where some community members were receiving medical care for the first time in several years or decades. As a result, the students had to advocate for the inclusion of occupational therapy services across language and cultural barriers, to both community members and existing medical teams. One-on-one interviews captured consistent data themes across student participants at all levels of experience. Lona depicted the need for advocacy as she described her gained perspective on advocacy:

I would like to take back the importance of advocating for our profession and taking a more active role in this. Not only is OT not fully known around the world; but being on

this trip with other health professions has made me aware of how much other health professionals do not know exactly what we do. OT is a very valuable and unique profession.

Claire also illustrated the need for occupational therapy advocacy and how she remained an empowered occupational therapy student:

It was difficult because OT did not exist in Mwandi, and we had to justify what OT is and our role. I think that will happen regardless, and it happens in the US, too. I think because our profession is so broad and doesn't fit into one category. It's hard for people to understand what we do. But then again, I think that's a good thing for a profession. We can make such an impact that is difficult to label us as any one thing.

Danielle further identified the need for occupational therapy advocacy in Zambia, as well as the added value the profession can add to holistic assessments of performance:

We need more advocacy for OT and what we do, and have a meeting on what we can do, and what OT can do. It was hard working with professions who only use the medical model and are not as holistic. Our profession in general needs to do more advocacy for what we do.

### **Professional Development Represented in Themes**

The themes that emerged represent the professional development that transpired during the international servant leadership experience. Resilient occupational therapy lens and empowered student clinicians supported the development of the substantive theory of professional development that emerged from the qualitative data. The students exemplified professional development, as evident in their one-on-one interviews and progression of confidence that was noted in their roles as mentors and mentees, which were captured in daily

field notes. An illustration of professional development was captured by Lona, who remarked, “I think that’s really important for the OT profession, or any medical profession, that has increased and just helped broadening my view of the world, can help with my professional development.” Jessica also portrayed her gained ability to identify the occupational needs of others, which contributed to both her personal and professional development:

I feel as if my awareness of poverty and the lack of basic needs some people have has increased. This impacts my personal and professional self because as a professional, I want to make sure I am able to reach these individuals who need my assistance and work with them in a way that they need.

### **Integration of Quantitative and Qualitative Data**

The integration of data concluded the embedded mixed methods design to demonstrate how the quantitative and qualitative data supported the same ideas of the process of professional development in the students. The quantitative data and qualitative data were collected and analyzed separately and then compared to gain an understanding of the professional development process that occurred for occupational therapy students while engaging in the roles as servant leaders in Zambia, Africa. The objective quantitative data demonstrated an increase in the disposition to think critically and in a systematic manner obtained by the CCTDI instrument. The CCTDI pre-posttest findings were statistically significant in areas of truth-seeking, open-mindedness, inquisitiveness, analyticity, and systematic thinking patterns. These quantitative results supported the qualitative data findings of increased self-perceptions of the ability to reason critically and problem-solve through challenging client factors while immersed in a resource-deprived country.

The quantitative data also demonstrated significant findings for increased capacity for students to be culturally responsive to the needs of community members by evidence in the IAPCC-SV instrument. This data demonstrated statistically significant increases in pre-posttest data regarding students' perceptions of cultural awareness, cultural knowledge, cultural skills, and cultural encounters in cultural desires constructs. This IAPCC-SV data was corroborated by the subjective interview and field data collected that indicated increased student subject data findings on cultural awareness and responsiveness while engaging as servant leaders in Zambia.

The mixed methods data in Table 4, the Matrix Integration of Qualitative Results and Quantitative Findings, indicates the integration of both qualitative and quantitative data to support emergent themes and statistically significant changes that represent a transformational change in the professional development of student occupational therapists.

Table 4

*Matrix Integration of Qualitative Results and Quantitative Findings*

Themes	Increased Critical Thinking	Increased Cultural Competency
<b>Resilient Occupational Therapy Lens</b>	Truth-seeking $p = .019, r = .31$	Open-Mindedness $p = .045, r = .22$
	Open-Mindedness $p = .045, r = .22$	Inquisitiveness $p = .029, r = .32$
	Inquisitiveness $p = .029, r = .32$	Confidence $p = .006, r = .47$
	Analyticity $p = .048, r = .31$	Cultural Awareness $p = .004, r = .66$
	Systematicity $p = .021, r = .34$	Cultural Skills $p = .005, r = .61$
	Confidence $p = .006, r = .47$	Cultural Desires $p = .031, r = .44$
	Cultural Encounters $p = .014, r = .51$	Cultural Knowledge $p = .006, r = .75$
	Cultural Knowledge $p = .006, r = .75$	
<b>Empowered Occupational Therapy Student</b>	Truth-seeking $p = .019, r = .31$	Confidence $p = .006, r = .47$
	Open-Mindedness $p = .045, r = .22$	Cultural Awareness $p = .004, r = .66$
	Inquisitiveness $p = .029, r = .32$	Open-Mindedness $p = .045, r = .22$
	Cultural Encounters $p = .014, r = .51$	Cultural Knowledge $p = .006, r = .75$
	Analyticity $p = .048, r = .31$	Cultural Skills $p = .005, r = .61$
	Cultural Skills $p = .005, r = .61$	Cultural Desires $p = .031, r = .44$
	Maturity of Judgment, $p = .054,$	

$$r = .28$$

$$\text{Systematicity } p = .021, r = .34$$

Table 4 indicates the integration of qualitative data and quantitative data for understanding the professional development process that occurred for occupational therapy students after participating in a 3-week servant leadership experience in Zambia, Africa. The matrix portrays how the quantitative results corroborate that the themed qualitative data provided the students with a resilient occupational therapy lens for critical and cultural thinking. The quantitative pre-posttest data provided information on how the experience that resulted in a resilient occupational therapy lens was supported by statistically significant increases in critical thinking and cultural competency constructs, which included truth-seeking  $p = .019$  ( $r = .31$ ), inquisitiveness  $p = .029$  ( $r = .32$ ), analyticity  $p = .048$  ( $r = .31$ ), systematicity  $p = .021$  ( $r = .34$ ), confidence  $p = .006$  ( $r = .47$ ), cultural encounters  $p = .014$  ( $r = .51$ ), cultural knowledge  $p = .006$  ( $r = .75$ ), cultural awareness  $p = .004$  ( $r = .66$ ), cultural skills  $p = .005$  ( $r = .61$ ), and cultural desires  $p = .031$  ( $r = .44$ ). The effect factor for the constructs also ranged from very large, such as cultural knowledge; large, for cultural awareness and skills; medium, for cultural desires; and low, for open-mindedness.

Table 4 shows the integration of the mixed methods data to support the second qualitative theme, empowered occupational therapy student. The quantitative data measured by the CCTDI and the IAPCC-SV supports the integration of the following constructs to support the empowered theme with statistically significant increases in truth-seeking  $p = .019$  ( $r = .31$ ), inquisitiveness  $p = .029$  ( $r = .32$ ), cultural encounters  $p = .014$  ( $r = .51$ ), analyticity  $p = .048$  ( $r = .31$ ), confidence  $p = .006$  ( $r = .47$ ), cultural awareness  $p = .004$  ( $r = .66$ ), cultural knowledge  $p = .006$  ( $r = .75$ ), cultural skills  $p = .005$  ( $r = .61$ ), cultural desires  $p = .031$  ( $r = .44$ ), and

systematicity  $p = .021$  ( $r = .34$ ). The effect factor to support empowered occupational therapy students varied from very large, such as cultural knowledge; large, for cultural encounters, cultural skills, and cultural awareness; medium, for confidence, truth-seeking, systematicity, inquisitiveness, and cultural desires; and low, for open-mindedness and maturity of judgment.

The statistically significant quantitative findings support the evidence to substantiate the themed data that students became empowered occupational therapy students after the 3-week servant leadership experience in Zambia. Empowerment was gained as the students demonstrated greater cultural responsiveness and critical thinking capacities as they reported increased confidence as servant leaders both at home and abroad and greater self-efficacy for advocating for the profession of occupational therapy.

The integration of qualitative and quantitative strands of data illustrates an overall growth in professional development in the student participants. These changes portray how the international servant leadership experience served as an expedited growth opportunity for student participants and supports the construction of a Servant Leadership Professional Development (SLPD) model shown in Figure 5.



## **Model Development**

The SLPD model illustrates the transformational process of professional development that student participants underwent during their servant leadership experience in Zambia. This experience was characterized by a stepwise process that was supported by both quantitative and qualitative data and illustrates the role transition and professional development that student participants experienced while in Zambia. The model depicts that professional development of cultural responsiveness and critical thinking skills derives through clinical observation, non-verbal communication, therapeutic use of touch, and inter/intraprofessional development. Prior to the immersion in Zambia, the study participants already possessed these foundational skills, which proved to be critical to their professional development specific to culture and critical thinking. Clinical observation, for example, stemmed from prior fieldwork or clinical observation that was required of the occupational therapy students. Non-verbal communication skills were also foundational skills that were taught in undergraduate and graduate occupational therapy classes that were later exemplified in fieldwork education. Therapeutic use of touch emphasized the importance of haptics and the healing power of touch for developing rapport and implementing effective occupational therapy interventions. Inter and intraprofessional development was a foundational skill that embodied the educational culture and curriculum of the university's MSOT program. The constructs of foundational skills, experience characteristics, skills developed, and professional outcomes will be discussed in greater detail in the following text.

## **Foundational Skills**

The foundational skills construct emphasizes how the servant leadership experience was created by unique characteristics that involved cultural immersion, servant leadership, and

participation in mentor and mentee relationships that were embedded in a resource-deprived environment. The servant leadership experience involved a 3-week immersion while being embedded in a culture that was diverse from the participants' prior educational experiences in the United States. This immersion required pre-trip immunizations, double entry visas, and significant preparation to assimilate into the rural bush village of Mwandi, Zambia. Servant leadership was an immersion requirement because the role of the faculty and students was to serve the inclusive needs of the *Zambian* community. The students had the expectation to meet community members where they were at developmentally and socially, and students had to conform to the cultural norms, scripts, occupational roles of the African country. This also meant that students had to adapt to meet the cultural values, beliefs, and needs of the community versus applying westernized perspectives in occupational therapy that were learned in the United States.

The servant leadership experience required the student participants to work together to adapt to contextual and environmental challenges. Novice occupational therapy students were paired with second-year or Level II students to facilitate reciprocal and supportive learning environments. New relationships formed during the immersion experience and the students were encouraged to support one another and to develop collaborative relationships further. The students were also mentored by the author, who served as the supervising occupational therapist while completing the servant leadership experience in rural Zambia.

### **Experience Characteristics**

The second construct of the SLPD model included the context of the resource-deprived, rural environment of Zambia, which was an instrumental facet to the servant leadership experience. The environment and contextual factors of Zambia were pivotal to the participants becoming servant leaders, as they had to learn to lead in the interest of others, despite lacking

their basic amenities that were routinely accessible in the United States. The lack of clean running water, electricity, medical documentation, and assistive equipment was a challenging component of the immersion into Zambia and required adaptation on behalf of students to negotiate these barriers that were characteristic of the living environments of those they were serving.

The second construct captures the harsh contextual and environmental barriers that impacted the daily occupations of the student participants as they worked to serve the needs of the Zambia community. For example, the students participated in rural bush outreach medical teams and it took several hours of commute time over rough terrain to arrive to the rural clinic. Furthermore, the surrounding environment was deprived of American infrastructures, such as street lights, which restricted working time to occur only during daylight hours between 6 a.m. and 6:00 p.m. This limited work time was further complicated by lengthy clinic commutes and an overall shortage in transportation. Resource deprivation also extended to the supplies that were transported from the United States, in addition to the underestimated high complexity of client comorbidities, such as blindness, HIV/AIDS, and severe malnutrition.

### **Skills Developed**

The third construct of the SLPD model consists of the skills that were developed by the student participants during the immersion experience in Zambia. The skills the students developed as a result of serving the occupational needs of the community members while immersed in Zambia included therapeutic use of self, self-awareness, critical thinking skills, problem-solving, creativity, and cultural responsiveness. Language barriers between the students and the community members required student occupational therapists to use themselves as agents of change to connect to their clients. Translators were often not available and required students to

adapt to language and resource deprivation. The students applied the skills of observation and nonverbal communication skills to build rapport and construct meaningful interventions. Self-awareness became a requirement as student participants had to analyze their values, beliefs, and attitudes about the delivery of health care and the impact culture had on health behaviors.

The students gained critical thinking skills as they had to carefully evaluate cultural considerations of clients while immersed in a resource-deprived context and while negotiating language barriers. These challenges contributed to changes in critical thinking skills, which led to creative problem-solving and the development of solutions to facilitate engagement in meaningful occupations. One example of this is when a local hospital identified the need for oral care at a rural elementary school. The student participants planned to teach oral hygiene and self-care to 30 children, and on arrival, it was discovered that there were over 90 children to teach, from grades 1 to 5, who did not speak English. Adaptations to the prevent/promote intervention approach involved the use of play occupations and the use of non-verbal body language to demonstrate oral care occupations while using a toothbrush. The children demonstrated competency and the teacher remarked that this activity with the student occupational therapists was the highlight of the year for the students.

Creativity was another skill that was derived from both qualitative and quantitative data findings. The students remarked how they gained skills in using existing resources in their contextual environment. One example was the reuse of student water bottles to construct maraca shakers for school-aged children, bowling pins for older adults, and later fishing rod material for local community members. This creativity to use existing resources was a response that illustrated how aspiring occupational therapy practitioners were responding to the needs of community members with the resources available to them. The students learned that their

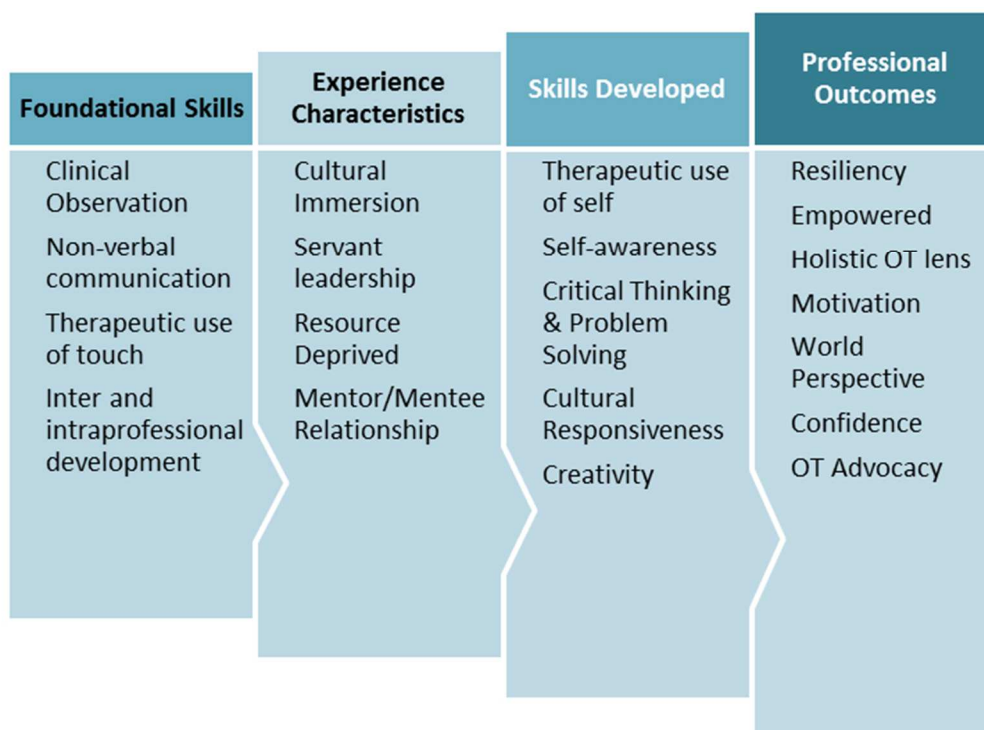
greatest success was their ability to be culturally responsive, which shaped interventions to focus on co-occupations, the inclusion of community members, and the celebration of a village to support one another.

### **Professional Outcomes**

The final construct that was developed in the SLPD model to depict participation outcomes was professional outcomes. This final construct signifies the professional outcomes that were achieved by the student participants as a result of their servant leadership roles and the quantitative and qualitative data that supported this growth. The professional outcomes that were gained through engagement in the international servant leadership experience included resiliency, empowerment, holistic occupational therapy lens, motivation, world perspective, increased confidence, and occupational therapy advocacy. Resiliency became a salient professional outcome, as the students had to adapt their thinking and habitual patterns of performance to meet the inclusive needs of the Zambian community. This required the students to become empowered to think critically and to problem-solve while working with both mentors and mentees in a collaborative team to make a difference in the lives of others while in Zambia.

The mixed methods data illustrated greater disposition or motivation to think critically and to make a difference in the lives of others in both Zambia and back home. As a result, the students gained a world perspective on how there is a need for culturally inclusive occupational therapy and to help others engage in meaningful occupations. This professional process also facilitated the development of greater confidence in developing critical thinking skills and greater confidence in their ability to advocate for the profession. This gained perspective led many students to declare that they would champion the inclusivity of occupational therapy

services in developing countries, as well as the importance of developing creative mechanisms to help others engage in meaningful occupations.



*Figure 5.* Servant Leadership Professional Development Model.

The SLPD model was developed to depict the sequential professional development process that can occur from a servant leadership experience that takes place in a contextually-rich setting for occupational therapy students. The model represents a professional development process that can transpire after being immersed in a resource-deprived environment that required students to use the first construct, which represents the students' foundations skill sets. These

foundational skill sets include the use of clinical observation, nonverbal communication, therapeutic use of touch, and inter and intraprofessional development skills that are required for them to be servant leaders in challenging practice contexts.

The second construct that represents the SLPD model is the experience characteristics of a servant leadership experience. The experience characteristics represent being fully immersed in a challenging, and/or resource-deprived context. Student growth is supported by a mentor/mentee relationship among the students and supervising educator or experienced students who lend support to novice occupational therapy students. This second construct empowers students to apply their pre-immersion foundational skill sets to overcome a challenging practice milieu while serving the occupational needs of the population.

The third sequential facet of the SLPD is the skills developed construct that results from using foundational occupational therapy skill sets while being immersed in a resource-deprived environment under careful mentorship. One of the most significant skills that evolve from the careful pairing of constructs one and two is self-awareness for the developing occupational therapist. This increased self-awareness can lead to greater therapeutic use of self and critical thinking skill sets that are required for occupational analysis and collaboration with the individual, community, or population being served. This intentional use of creativity to construct a culturally responsive intervention plan to promote engagement in meaningful occupations changes the development of the practitioner.

The final sequential constructs of the SLPD model are resiliency and empowered occupational therapy students. These student professional development skills can derive from the use of prior practice knowledge and skill sets while being immersed and mentored in a resource-deprived environment. Intentional practice immersion requires adaptation and can result in the

creation of critical thinking skills and cultural responsiveness to adapt to challenges encountered. The application of the SLPD model at a curriculum level can foster a holistic occupational therapy lens that promotes resiliency, empowerment, and confidence. The students who gain professional development skill sets during critical learning times can gain a world perspective of occupational therapy leadership that extends beyond westernized boundaries of health care and propels large-scale advocacy for the profession.

### **Summary**

Chapter 4 depicted the findings of the mixed methods research study that highlighted the cultural competency, dispositional critical thinking, and professional development changes that occurred for all nine occupational therapy participants. Both quantitative measurements tools of the CCTDI and the IAPCC-SV illustrated statistically significant changes at the very large to medium effect sizes for the participating occupational therapy student participants. Qualitative data was also analyzed to find emergent themes of resilient occupational therapy lens and empowered occupational therapy students. The mixed methods results were integrated to construct the SLPD model to illustrate the sequential professional development process that occurred during the 3-week servant leadership experience in Zambia. The data and model in this chapter can be used as a framework to guide the development and implementation of future servant leadership experiences to expedite the professional skills and learning outcomes of students.



## **Chapter 5: Discussion**

Accredited occupational therapy programs across the United States are working to support the distinct value of the profession by addressing the global needs of society while infusing strategic international opportunities into the education of future occupational therapists. This quest to infuse holistic care to ensure quality of life celebrates multicultural diversity for all populations across communities with complex occupational needs. The AOTA supports this paradigm shift in efforts to maximize wellness and engagement in meaningful occupations in everyday living for all people (AOTA, 2017). In contrast to the rising need to enculturate prospective practitioners beyond a westernized perspective, there is a lack of evidence on the implementation of international experiences to support this transformative learning. The purpose of this mixed methods study was to gain an understanding of the professional development processes that occurred for student occupational therapists who participated in a 3-week immersive servant leadership opportunity in the developing country of Zambia, Africa. The goal of this study was to construct a theoretical understanding of the professional development process that occurred, as well as to measure the effect on the development of critical thinking and cultural competency for the developing occupational therapy professional.

### **Research Questions**

The mixed methods research study evolved from an embedded design to answer the following questions:

1. “What is the professional development process for occupational therapy students participating in an international learning experience?”
2. “Does participation in a supervised international immersion experience increase critical thinking among occupational therapy students?”

3. “Does participation in a supervised international immersion experience increase cultural competency among occupational therapy students?”

These questions were designed to inform the investigator of the effects of an occupational therapy servant leadership experience for student participants who were immersed in a cultural context that was void of a westernized practice of health care.

### **Interpretation of Findings**

The qualitative strand of data yielded a substantive grounded theory on the professional development process that student occupational therapists experienced after participation in a 3-week international servant leadership experience in rural Zambia. The emergent professional development theory supported the themed data that included resilient occupational therapy lens and empowered occupational therapy students. This transformative professional development process exemplified how participation in the servant leadership experience expedited learning that facilitated changes in cultural responsiveness and critical thinking skills that supported the strong qualitative data of student resiliency and empowerment.

### **Qualitative Findings**

The data illustrated how students can undergo a significant transformation to their paradigms of occupation, critical thinking skills, capacity to be culturally responsive, and leadership skills when they are placed in servant leadership roles in a resource-deprived developing country. This process can happen quickly, as students learn to suspend their western medicine perspectives in as little as 36 hours of travel from the United States. The students in this mixed methods study learned that one of their most significant assets in rural Zambia was themselves and that using their skills to be culturally aware would be the key ingredient to becoming agents of change for others. The findings portrayed how a shifting mindset can occur

when students learn that, even with few resources, they have enough to serve the needs of others. Elle supported this emergent data as she reflected on gained awareness for using herself as a therapeutic tool:

To use my therapeutic use of self, to find something familiar to them all and build rapport. I will never forget the look on the gentleman's face who wanted to read the Bible and could not, and I found him reading glasses.

The qualitative data illustrated how the students gained an appreciation for the health care systems and basic amenities in the United States. The students learned how to negotiate resource deprivation as they walked alongside Zambians for many miles to obtain clean drinking water, or when they washed clothing by hand and learned to overcome the lack of comforting amenities, such as indoor plumbing. Daily living with modest accommodations can provide students with new perspectives to consider Maslow's Hierarchy of Needs (McLeod, 2018) and demonstrate that it does not take expensive therapeutic tools to help people to do what they want and need to do in their daily lives. Servant leadership opportunities abroad can facilitate the development of cultural thinking changes for universal needs, such as shelter, safety, love, and belonging.

The findings illustrated how servant leadership experiences in a developing country can provide students with a gained sense of resiliency. The student participants learned to harness their abilities to think critically while developing therapeutic use of self. These skill sets are created from culturally rich opportunities that require activity analysis to modify, promote, enhance, and create opportunities for individuals to engage in meaningful daily living tasks while overcoming barriers. The findings exemplified how the students can transform into professionals when they learn ways to adapt their first-world thinking patterns to consider the needs of others. Resource-deprived contexts require students to alter their problem-solving skills beyond

prefabricated interventions and to be innovative with everyday objects to help individuals engage in occupations. This ability to adapt thinking patterns and to be creative with few resources was further reinforced in the qualitative data when Danielle described her experience in adapting basic resources:

To use water bottles in treatment sessions, instead of throwing them away. Like at the preschool, we put rocks in water bottles and made shakers, and they loved it. Where in U.S. clinics, we think we need all the supplies [and] we really don't. Just ask what is important to them.

Themed qualitative findings further illustrated that students can learn to value the cultural needs of their clients while working in a developing country such as Zambia. The environment and context are critical to this transformation process. The qualitative data revealed how students learned to problem-solve through language barriers and adapted past westernized scripts of autonomy and self-sufficiency. For example, the qualitative data demonstrated how the participants gained awareness of Zambian cultural norms for engagement in co-occupations as community members worked alongside students to build homes for AIDS orphans. Valued co-occupations were also observed when entire villages came together to celebrate birthdays, as well as the important responsibility of childcare, in which the whole village of Mwandi takes pride. These contrasting cultural occupational roles that international servant leadership opportunities offer to students allow them to adapt their perspectives on family cohesion, social participation, and community integration to become better equipped to facilitate therapeutic interventions for a globally connected society.

This transformational growth that occurred during the servant leadership experience was an illustration of how such experiences can empower student participants. The data illustrated

how the student participants evolved from having low confidence as servant leaders on Day 5, to becoming empowered by Day 19 of the immersion experience. Similar servant leadership experiences can be developed to accelerate confidence through mentorship, which supports professional development and learning. The qualitative findings illustrated how instrumental it is to pair novice occupational therapy students with experienced occupational therapy students, and the importance of nurturing relationships through debriefings and reflective practices. Qualitative data portrayed how servant leadership experiences can be instrumental for developing the capacities of mentors and mentees and highlighted the instrumental role self-care plays for the health and wellness of student leaders.

The qualitative data was instrumental for illustrating how a 3-week servant leadership experience can transform student participants in ways that traditional dyadic learning experiences cannot. This transformation occurred across a continuum of novice to experienced occupational therapy students in the study. The students' perceptions echoed how instrumental experiential learning is for altering previously held beliefs about occupation, culture, and leadership into new paradigms of perception. The qualitative findings provided rich data on how value can be derived from experiential learning opportunities that require students to live, work, and be immersed in developing countries that required adaptation. This gained problem-solving and cultural responsiveness that developed on behalf of the participants illustrates how implementing a short, carefully planned immersion in a resource-deprived context can serve to produce expedited professional development. This development is not only profound but also imperative to the future roles students will play as occupational therapy practitioners.

## **Quantitative Results**

The quantitative strand of data collected by the CCTDI illustrated how students can endure transformational change to their motivational drives to think critically after a 3-week servant leadership experience. The changes that were represented in the data indicate that participating students may develop greater dispositional skills to think critically as a result of hands-on, experiential learning experiences that take place in a developing country. For example, the quantitative data demonstrated how being a servant leader in Zambia resulted in expedited professional development, which was facilitated by an environment that required students to adapt to complex cultural differences. Because of this immersion, the students demonstrated augmented critical thinking skill sets that equipped them to understand better a client's behavior and to provide effective occupational therapy interventions.

The significant change in dispositional critical thinking patterns that were supported by the CCTDI data are promising outcomes for occupational therapy programs and can be avenues in which transformative learning can occur in curriculums. The findings illustrate how students can become more systematic in their thinking when analyzing client data in resource-deprived environments. For example, the client data in Zambia was difficult to gather because of the absence of medical charts, and when charts were available, they were often written in the native Lozi language. As a result, past medical histories were difficult to interpret, and the students were required to analyze non-verbal behaviors, which included facial grimacing, posture, and the energy of individuals. The students had to adjust their mindsets to this new way to perform occupational therapy evaluations, as they were accustomed to accessible and portable electronic medical records and supportive allied health professionals. This profound growth in analysis of behavior and adaptation to occupational therapy evaluations suggests that similar experiential

learning opportunities should be provided to occupational therapy students and embedded into programs to accelerate professional growth and development.

The changes in CCTDI scores indicated that servant leadership experiences can result in gained personal cognitive capacities that are paramount to serving the occupational needs of communities living without access to routine medical care. For example, the students in Zambia were required to rely on their best judgment and to use their therapeutic use of self, which supported data findings on improved confidence for problem-solving abilities. These significant findings validated how expedited servant leadership experiences can result in adaptation to participants' patterns of thinking, and how this change can contribute to professional paradigm and schema development. The quantitative data further supported the ability to be open-minded, which supports the notion that experiential, hands-on learning can result in increased competency to understand a client's occupational habits, routines, and roles while being accepting of diverse cultural backgrounds.

This study illustrates how a servant leadership experience abroad can result in gained abilities to adapt and anticipate client outcomes by increased analyticity scores, which originate from OA and mastery of new clinical environments. The CCTDI results corroborate the qualitative findings that students underwent OA to master obstacles encountered abroad, which contributed to greater dispositional critical thinking skill sets for solving problems as servant leaders in Zambia. The gained ability to engage in critical thinking validates the time, effort, and careful planning it takes to implement international servant leadership experiences because of the immense benefits it provides to accelerating student occupational therapy growth and development.

The quantitative data collected by the IAPCC-SV supports the transformational change that servant leadership experiences can make to participating students' cultural thinking skills and cultural competency abilities. The quantitative strand of data indicated that the participants had significant increases in cultural competency with very large to medium effect size in cultural awareness, cultural skills, and cultural encounters skills. These changes substantiate the qualitative data findings and indicate the critical role that experiential learning and servant leadership can play for the developing practitioner. The data findings support the value in developing partnerships with international stakeholders to support the cooperative learning and services that can benefit both students and community members.

The IAPCC-SV data illustrated how a 3-week servant leadership can also lead to professional development changes that will play a powerful role in the future careers of occupational therapy practitioners. Such immersion experiences can provide students with critical insight into how to be cognizant of their personal cultural beliefs and to gain an appreciation for the values of other individuals, populations, and communities they serve. For example, the IAPCC-SV data illustrated how the participants had increased cultural knowledge and motivation to be culturally responsive health care professionals. These significant improvements in cultural awareness, skills, encounters, and desires corroborate the qualitative data findings that servant leadership experiences can expedite learning, accelerate professional development, and shape practitioners into leaders of practice. These quantitative findings offer prevailing insight into how the investment of time and resources on behalf of occupational therapy programs is worth the effort by offering great dividends of increased growth and development for prospective occupational therapists.



## **Integrated Findings**

The integration of the qualitative and quantitative findings reveal consistency between the two strands of data that depict how a 3-week servant leadership experience can result in accelerated learning and professional development for the participating students. Positive findings were found for occupational therapy students from the novice to the experienced level, which indicates that a variety of student participants can benefit from the experience and undergo changes to their cultural and critical thinking skills that lead to role competency as servant leaders. The findings indicate that servant leadership opportunities abroad can lead to the empowerment of student occupational therapists and personal causation to be culturally aware, analytical, and systematic in problem-solving abilities to serve community members. The mixed methods data illustrates how an intensive 3-week cultural immersion experience in a developing country is not just advantageous but should be considered in efforts to ensure practitioners have the professional skill sets that are needed to meet society's diverse occupational needs. This data portrays how international servant leadership experiences can provide students with gained capacities to be culturally inclusive and to have greater dispositional skills to think critically. The student servant leaders in Zambia learned to be resilient and empowered as they responded to the community's cultural needs, which resulted in expedited problem-solving abilities. The findings of this study support the integration of experiential, hands-on experience with individuals across cultures to support the learning and professional development of student occupational therapists. The mixed methods data exemplifies how carefully planned servant leadership experiences in resource-deprived contexts can be the catalyst for transforming the cultural thinking and critical thinking capacities of participating students. The data suggest that such learning experiences

would enrich dyadic learning and should be considered by local and global institutions in efforts to prepare occupational therapy professionals for a workplace that is globally connected.

### **Relationship of Findings to Guiding Theoretical Perspectives**

This mixed methods research study required student occupational therapists to adapt to the physical, social, political, and economic obstacles they faced while being immersed in Zambia. Adaptation was a requirement for assimilation, as was carrying out servant roles while immersed among individuals who spoke several native languages and very few who spoke English. Adaptation was further required to overcome culturally different social norms, such as a strong emphasis on female roles to produce large families and less emphasis on female education, which were contrary to the cultural beliefs and values that many of the student participants held to be true. The student participants had to remain self-aware through their own OA to elicit positive coping behaviors and to self-manage their feelings and emotions of being a minority in a country that was void of their westernized backgrounds.

### **Occupational Adaptation**

Schultz and Schkade (1992) depict OA as both a process and a state for individuals. This process of change requires engagement in occupations that involve adaptation to challenging circumstances, such as immersion into a context that is void of basic survival amenities, such as access to clean drinking water, electricity, and restroom facilities. Further challenges included adaptation to the lack of adaptive equipment, medical supplies, documentation, and recognition of the occupational therapy profession. These types of occupational challenges were evident while abroad and led to changes in critical thinking, cultural thinking, a resilient occupational therapy lens, and empowerment as occupational therapy students developed professionally.

These challenging experiences provided the vehicle to alter three systems of human functioning: the cognitive, psychosocial, and sensorimotor systems of the student participants.

The theoretical premise behind OA is that successful adaptation to contextual challenges can lead to relative mastery. One example of this adaptation was when a small group of students purchased a long-handled wooden spoon at a local market to help an individual complete donning of a pair of donated shoes. On arrival to the old folks home where the individual resided, the caretaker of the home announced, “Oh, good a cooking spoon! We’ve needed one for a long time for cooking nshima!” The students had to adapt their treatment intervention from lower body dressing to cooking occupations that better fit the needs of the home. The students learned that the importance of meeting basic survivor occupations took precedence over lower body dressing tasks. This illustration of OA is one example of how students had to adapt their thinking patterns on the spot in efforts to meet the occupational needs of the Mwandi community. This routine problem-solving led to changes in the students’ critical and cultural thinking patterns, which contributed to professional development and greater competency.

### **Experiential Learning Theory**

This mixed methods research study developed with the intentional use of Kolb’s (1984) experiential learning theory to explain how adaptation can occur when learning occurs in new environments, which can transcend into transformational learning. The student participants served the needs of others while immersed in a resource-deprived country to promote quality of life and engagement in occupations. This type of learning was intentional, as the students were required to reflect on their participation and occupational roles, which resulted in cognitive changes that represented critical thinking and cultural changes. This intentional pedagogical design of the mixed methods study is supported by Kolb’s (1984) experiential learning theory

and resulted in significant professional development changes that will shape the future practice of the participating occupational therapy practitioners.

International experiential learning experiences can bridge the gap between dyadic coursework on cultural values, desires, and concepts to solidify cultural learning and provide a catalyst for professional development. Global exposure to language and cultural diversities can be the vehicle for transforming learning on the importance of human occupations and the important role of the practitioner for ensuring health, wellness, and quality of life. These transformative learning experiences can support the professional development of aspiring practitioners to integrate cultural responsiveness into their practices and advocacy for cultural inclusion of their clients. Aldrich (2015) discussed how pairing international experiential learning to curricula could help meet the needs of a globally connected profession and ensure the professional is equipped to understand the complexity of human occupation.

Experiential learning is an invaluable learning tool that can bind occupational therapy core philosophies with learning that results in producing practitioners who act as change agents for the profession (Jeffery, 2010). Experiential learning opportunities require a careful amount of critical reflection and processing before and after international immersion experiences to ensure learning has taken place. This study provided student participants with guided mentorship, education, and pre-departure education on cultural norms before immersion into Zambia as servant leaders. After immersion, the students found that their prior knowledge about health, wellness, and social roles and their previously held beliefs about engagement in occupations were different from what they anticipated during the pre-departure preparation. It was not until cultural immersion that the students gained an understanding of how culture shapes health

behaviors, and the dyadic lecture, discussion, and materials were ineffective for fully preparing the student participants for their roles as student leaders.

Experiential learning opportunities, such as immersion to Zambia, Africa, are more valuable for developing critical reasoning skills and problem-solving abilities than traditional classroom-based learning experiences (Coker, 2010). To facilitate the experiential learning process abroad, the student participants were mentored. They met daily as a group to debrief their thoughts, feelings, and changing perceptions as servant leaders in Zambia. The qualitative data supported the use of experiential learning and critical reflection strategies as a process to support the professional development changes that occurred for the student participants.

Literature in occupational therapy supports the use of experiential learning experiences in entry-level curriculum to facilitate professional development and identity formation among practitioners. Ashby, Adler, and Herbert (2016) discussed the importance of integrated real-life experiences with hands-on opportunities to socialize students to obtain professional development and positive professional identities that are required for future practice. Qualitative data supported the obtainment of enhanced professional identities as participant data illustrated that the students gained the ability to lead, serve, and advocate for client-centered care that was culturally inclusive. The students also displayed greater leadership capacity and confidence that extended to both professional and personal growth.

### **Servant Leadership**

This mixed methods study developed from the infusion of servant leadership principles to transform student learning. Prior to departure, the students learned the theoretical foundations of servant leadership, which included awareness, empathy, healing, stewardship, listening, conceptualization, growth of individuals, persuasion, and growth of communities (Spears, 1995).

The students were encouraged to embrace their roles as servant leaders in efforts to meet the inclusive needs of community members in Zambia and to build the capacity of others through interpersonal relationships developed out of respect (Dillon, 2001).

Servant leadership is an influential mechanism for effectively implementing team approaches in the delivery of high-quality health care. Neill and Saunders (2008) discussed how servant leadership is a powerful skill set that facilitates professional growth while improving health care outcomes through ethical behavior, shared decision-making, and interdisciplinary teamwork. This leadership approach fosters team members both to serve the needs of others and to lead as a unified group. This process involves creating a collective culture that fosters resiliency of the health care team while working and advocating for the needs of those served. This study infused servant leadership principles into the international immersion design to foster a shared vision of leadership while in Zambia. The servant leadership roles were to inspire the participants to help underprivileged community members achieve self-actualization, quality of life, and engagement in meaningful occupations. Nemire, Margulis, and Frenzel-Shephard (2004) discussed how it is difficult to teach students how to be altruistic servant leaders and that this learned compassion and motivation to serve others requires the intentional use of service learning to transform learners, where the 3-week immersion played an instrumental role in student professional development.

Servant leadership involves creating relationships in efforts to build the capacity of the follower, to encourage the follower to live up to his or her given potential (Thomas, du Toit, & van Heerden, 2014). The students received mentorship by the investigator and were encouraged to support each other as servant leaders while in Zambia. Servant leadership involves building the capacity of others to lead and empower followers, and, in turn, to be a servant leader for

others. The servant leadership philosophy not only shaped the construction of the experiential learning opportunity in resource-deprived Zambia, but also contributed to the students' professional growth and development.

The qualitative data findings illustrated that the participants became empowered occupational therapy students after occupying the role as servant leaders. This sense of empowerment extended to themed data findings that supported gained confidence as the students anticipated their roles as servant leaders both abroad and back home. Coded data supported a positive experience in participating in mentor and mentee relationships, learning through doing, and increased coping capacities. This leadership process became increasingly natural over time and contributed to the themed data of gained confidence in leadership capacities and skill sets and a developed commitment for occupational therapy advocacy at the universal level.

### **Relationship of Findings to the Literature**

The occupational therapy literature supports engagement in meaningful occupations as a fundamental facet of the human condition. This engagement in occupation shapes health behaviors, growth, and development, and serves as a universal phenomenon across borders and contexts (Barker et al., 2010; Hasselkus, 2002). It is extraordinarily important for entry-level occupational therapy practitioners to gain exposure to multicultural environments to understand diverse occupational engagement and roles and to be prepared for their future roles.

Today's health care requires occupational therapists to be culturally responsive on their entry into practice in efforts to meet the needs of the ethnically diverse population across the United States (Taylor, 2014). This globalized market of health care is shaping the education curriculums across the country, as universities and colleges work to produce global citizens to meet diverse needs across populations (Pappano, 2007). This preparation starts with educating

the next generation of occupational therapy professionals to be responsive and effective across cultures (Short & St. Peters, 2017).

The AOTA (2013) and the ACOTE (2013) proclaim that it is the responsibility of accredited programs to ensure that graduated entry-level practitioners have the skills to meet the diverse needs of society that encompasses engagement in meaningful occupations across contexts with multicultural communities, populations, and individuals. The adaptive lens that is required of occupational therapy professionals to function in a globalized health care market requires critical thinking skills, adaptation, activity analysis, and cultural sensitivity. The evidence in the field suggests that the best way to prepare practitioners for this complex health care milieu is to provide experiential, hands-on opportunities that can bridge didactic coursework to actual practice (Short & St. Peters, 2017).

The investigator of this study is a faculty member who has developed domestic and local partnerships with an interprofessional team to serve the medical and occupational needs of the Mwandi village in Zambia, Africa. This mixed methods study illustrated how a 3-week servant leadership experience in a rural and developing area resulted in the professional development and statistically significant changes in cultural competency and dispositional critical thinking skills of the student participants. The results of the mixed methods study align with the existing literature by Short and St. Peters (2017), who discussed the need for integrated service learning in the occupational therapy entry-level curriculum. They found statistically significant increases in cultural intelligence scale after a service learning experience in Haiti for entry-level doctorate students. The results of the servant leadership experience in Zambia insist that cultural and dispositional critical thinking changes occur after the immersion. This is consistent with the findings by Short and St. Peters, who revealed that increased metacognitive, cognitive,



motivational, and behavioral cultural intelligence of the students can be achieved through international service learning experiences and that these changes can be achieved through careful pedagogical designs.

The 3-week servant leadership experience in Zambia illustrated statistically significant changes with medium through very high effect sizes for cultural competency constructs of the IAPCC-SV in the areas of cultural knowledge, cultural skills, cultural awareness, cultural desires, and cultural encounters. These changes in cultural competency corroborate the findings that Keane and Provident (2017) found after a 9-day service learning experience to Ibarra, Ecuador. The authors discovered that occupational therapy and physical therapy students had increased IAPCC-SV cultural competency scores and encouraged the use of international service learning experiences to enhance student self-awareness for working with diverse cultures.

This mixed methods study infused a grounded theory perspective into the design to gain a holistic understanding of the professional development process that occurred for student occupational therapists immersed as servant leaders in Zambia. The results indicated that the students had increased critical thinking and cultural competency skills through the themed qualitative data that illustrated that students gained a resilient occupational therapy lens as they became empowered occupational therapy students. These mixed methods findings support the research by Bossers et al. (2010), who found that occupational therapy practitioners who participated in international practice placement settings had increased professional development in terms of adaptability, cultural sensitivity, and increased autonomy. The alignment of the current study and previous research findings insist that international practice placements can result in adaptation of student thinking patterns, which ultimately influences the cultural knowledge of one's self and of others that is essential for occupational therapy practice.

This mixed methods study indicates that the experiential learning that occurred in Zambia was an avenue that applied hands-on learning and clinical reflection to enhance the development of cultural responsiveness and disposition of critical thinking skills in the student participants. This study supports the work by Coker (2010), who found that experiential learning experiences are critical for the application of didactic coursework in occupational therapy students. Coker insisted that the clinical application of coursework is paramount in the clinical preparation of student occupational therapists. This mixed methods research supports Coker's findings on the importance of applying foundational occupational therapy knowledge to clinical practice and highlights how an international servant leadership experience can foster the development of creative assessment and intervention approaches while serving the occupational needs of a culturally diverse population.

## **Implications**

### **Implications for Practice**

The present research findings suggest that international servant leadership experiences contribute to an increased disposition of student occupational therapists to think critically in practice settings. This ability to critically assess and develop meaningful intervention plans for complex individuals across diverse populations not only is advantageous but also a requirement for working as an occupational therapy practitioner as outlined in *Standards of Practice for Occupational Therapy* (2015b).

Some scholars argue that the disposition to think critically may be more important than the actual ability to engage in critical thinking skills. It is imperative that occupational therapy educators work to facilitate the internal motivation of students to engage in critical thinking as they prepare to solve complex problems across populations in the workforce (Lederer, 2007).

Immersion into diverse contextual settings that provide real-life interactions with clients can foster the development of critical reasoning and thinking skills that are essential for the practice for entry-level clinicians (Coker, 2010). This mixed methods study provided an avenue for experiential, hands-on learning that demonstrated the mechanism to foster cultural awareness and dispositional critical thinking skills in the student participants.

The results of the study indicated that increased perceptions of cultural competency were illustrated in significantly increased cultural desires, cultural skills, cultural awareness, cultural knowledge, and cultural encounters of the student participants. These gained attributes represent a shift in perception that is in tune with the needs of others that is diverse from one's own culture. These changes in thinking patterns led to an empowered occupational therapy lens that extends beyond the confines of westernized practice and supports the inclusivity of culture across contexts. This shift is instrumental in the practice of occupational therapy practitioners as health care becomes more portable and societies become more pluralistic and diverse in nature.

The ACOTE (2011) outlines the importance of understanding global societal issues and the need to consider populations who are at risk for chronic health conditions. The ACOTE Standards (2011) also articulate the need to “utilize national or international resources in making assessment or intervention choices and appreciate the influences of international occupational therapy contributions to education, research, and practice” (p. 29).

Several strategies can be used to enhance or build the skills of practicing occupational therapists. For example, practitioners can participate in continuing education or service learning opportunities to increase their capacities to be culturally responsive and improve their practice and critical thinking skills. Their opportunities might include intentional cross-cultural client assignments to therapy practitioners to intentionally increase the diversity of caseloads.

Therapists and clinics should also take advantage of community service opportunities in low-income and resource-deprived environments to replicate challenging practice contexts to build their skill sets, adaptability, and occupation-based practices.

The following recommendations support the need for occupational therapy practitioners to be culturally inclusive to meet the diverse occupational needs of the community members they serve to support a global health care market. These recommendations include:

1. Develop cultural competency continuing education through experiential learning opportunities for existing occupational therapy practitioners.
2. Occupational therapy practitioners facilitate mentorship of new graduates to be culturally inclusive and to work with few resources.
3. Continue research and advocacy and develop servant leadership initiatives in state, national, and international venues to increase the capacity of the profession to meet the global and occupational needs of communities, populations, and individuals.

### **Implications for Education**

This study exemplifies the benefits of an international service learning experience for entry-level occupational therapy students. The 3-week immersion experience focused on serving the needs of the Mwandi village and suggests that the participants experienced increased cultural competency and dispositional critical thinking skills. The improvements were not isolated to specific student participants but were experienced by 100% of the nine participants. These improvements were corroborated by the qualitative data findings and were present in all students, despite variations in experience and education. The participants demonstrated OA when they faced challenging circumstances in Zambia, and naturally had to adapt to cultural customs, which led to a resilient occupational therapy lens and professional development.

The ability to critically think and adapt treatment interventions is paramount to the practice of occupational therapy practitioners. Lederer (2007) discussed how one of the most influential things that occupational therapy educators can do is to model dispositional critical thinking outside of the classroom. The author led the group with an intentional focus on adapting to the needs of the Zambian community and emphasized the ultimate goal of ensuring safety, quality of life, and engagement in meaningful occupations. The inevitable struggles that occurred in Zambia were experienced and debriefed together, and it was important to reflect and consciously learn through doing (Kolb, 1984).

Accredited occupational therapy programs across the United States should consider integrating international experiential learning experiences that support servant leadership into curriculum designs. This study exemplified how students learned to adapt to cultural, language, social, and environmental challenges to meet the inclusive needs of the Mwandi community. This experience was an illustration of how powerful experiential learning can make changes to the dispositional critical thinking skills, cultural competency, and professional development skill sets of tomorrow's practitioners.

This mixed methods study illustrates how experiential, hands-on learning opportunities can expedite learning and teach students how to use themselves as agents of change versus relying on prefabricated tools that can be found in generic clinics. The student participants learned the power of being creative, of analyzing community roles, and of developing client-centered intervention plans. The students learned the value of observation and reading nonverbal behavior due to the lack of translators. This experience led to the development of rapport building, which exemplified how cultural responsiveness is integral to developing therapeutic use of self in student occupational therapists.

Teaching didactic coursework and integrating simulated case studies on cultural responsiveness is not sufficient preparation for entry-level practitioners. Four Level II occupational therapy students who participated in the servant leadership reported gaining a true sense of cultural competency after the immersion experience, which was more significant than their local Level II experiences. The mixed methods evidence suggests that student occupational therapists should work in resource-deprived environments, with diverse cultures, to be fully prepared for entrance into today's globalized health care market.

### **Recommendations for Occupational Therapy Education**

The mixed methods study demonstrated how a 3-week servant leadership immersion experience into a developing country led to expedited professional development, dispositional critical thinking skills, and cultural competency on behalf of all of the occupational therapy student participants. These strong results insist that greater examination be taken at the infrastructure of accredited occupational therapy programs, including analysis of current Level I and Level II fieldwork schedules and community integration coursework. Considerations should be made to strengthen partnerships between fieldwork coordinators and international stakeholders, which include developing diverse partnerships with international colleges, universities, community organizations, non-profits, and non-traditional settings to maximize immersion into diverse cultural contexts and communities that create cross-cultural exchanges that support expedited growth and efficient learning.

A recommendation to consider for Level I fieldwork education is replacing 1-day, 12-week, fieldwork placements with a continuous 3-week immersion experience, such as the servant leadership experience in Zambia, Africa. This intensive experience may be far more time efficient and cost effective, and it may alleviate the burnout of local community partners. The 3-

week immersion experience would be most beneficial with a small group of occupational therapy students (5 to 10) that included faculty mentorship to solidify learning, debriefing, and supervision. This immersion experience would also provide a service to an international partner, which would have the potential for creating opportunities for Level II fieldwork placements abroad.

The above recommendations are specific to individual curricula; however, modifications to the accreditation standards could result in significant and widespread enhancements to occupational therapy education. Accreditation standards should include the experiential learning opportunities for students in challenging contexts, which will facilitate their development of critical thinking and cultural responsiveness.

### **Alternative Options for Learning**

There are many obstacles to overcome to ensure a successful experiential learning immersion in a developing country, which may not be a viable option for many occupational therapy programs across the United States. However, adaptations and modifications to the general design can be adopted to ensure hands-on experiential learning is achieved with a diverse population in need. It is recommended that experiential learning opportunities be completed at the local level and involve serving the needs of individuals who are living in poverty; have experienced trauma; are experiencing homelessness; have complex diagnoses, such as HIV/AIDs; live in immigrant refugee centers, disaster relief centers, or community shelters; and many other diverse cultural groups who lack resources.

The following recommendations support the need for experiential learning opportunities to be embedded into the infrastructure of entry-level occupational therapy education to ensure

that practitioners are prepared for the diversified and global health care market they will be entering after graduation. These recommendations include:

1. Embedded opportunities for experiential, hands-on learning opportunities with actual clients with diverse languages, socioeconomic status, education, sexual preferences, backgrounds, or culturally contexts.
2. Infusion of servant leadership principles to guide experiential learning opportunities that offer guided mentorship opportunities to build the capacity of students to meet the inclusive needs of the community, population, or individuals in which they serve.
3. Emphasis on client-centered and occupation-based intervention approaches that rely on students using themselves as therapeutic agents of change and that focus on activity analysis and creativity for developing intervention plans.
4. Build alliances with global and local stakeholders to meet the cultural and inclusive needs of the community or population that are resource or economically-deprived that could foster a mutual opportunity for learning and community development.
5. Develop alliances with international occupational therapy programs to foster university exchange programs or shared fieldwork resources to provide cross-cultural exchange programs that are mutually beneficial for each university partner and community stakeholder.
6. Develop cultural responsiveness continuing education through experiential learning opportunities for existing occupational therapy practitioners to facilitate mentorship of new graduates.



7. Continue research, advocacy, and development of servant leadership initiatives in state, national, and international venues to increase the capacity of the profession to meet the global and occupational needs of communities, populations, and individuals.

### **Limitations**

Several limitations were present in this mixed methods study. The small sample size of nine participants greatly hindered the reliability of the quantitative data findings from the CCTDI and the IAPCC-SV. The international experience was a voluntary interprofessional immersion, which accommodated a small number of occupational therapy student participants. Furthermore, the international logistics, supervision, and cost of the elective trip may have a significant barrier to larger student recruitment. Recommendations for future studies include the inclusion of larger participant sample sizes and to add a control group of participants in a traditional occupational therapy setting.

Another limitation of the study was that the student participants possessed varying levels of occupational therapy education. Two student participants only had 1 year of occupational therapy dyadic coursework, three students had 2 years, and four students had 3 years of MSOT coursework. The four most advanced students had previous Level II experience with potentially diverse cultures, which may have influenced the median score obtained by the assessment tools, such as the open-mindedness construct. Future studies should evaluate the dispositional critical thinking and cultural competency skills of students with similar levels of experience to validate the level of expedited and efficient learning. Further limitations in the study include potential bias from the self-reported IAPCC-SV measurement tool that may hinder the ability to generalize the quantitative findings.

### **Recommendations for Future Studies**

The results of this mixed methods study suggest that continued research needs to be conducted to measure the effects an international servant leadership experience has on the developing occupational therapy professional. These experiences should take place in developing countries that are culturally rich, resource-deprived, and void of the westernized perspective. These studies should examine critical thinking skill sets, problem-solving abilities, and the capacity of students to construct client-centered and occupational-based interventions that are responsive for the individuals, communities, or populations being served.

Further studies should examine the effects the mentor/mentee relationships have on developing occupational therapists who occupy roles as servant leaders while engaged in international experiential learning experiences. Mentor and mentee roles should be examined to gain an understanding of how these roles shape future leadership practices as well as to examine the capacity of the follower. Further leadership traits to assess include professional identity and personal causation for those engaged in servant leadership experiences and how this affects professional development.

Longitudinal studies would contribute to this line of research to assess post-graduation practitioner outcomes of those who participated in international servant leadership experiences during dyadic coursework. Examples of future studies would be to longitudinally follow the participants and reassess cultural competency and perceived professional development from the servant leadership experience and how participation abroad contributed to their current roles as practitioners.

Other longitudinal considerations would be to measure practitioner resiliency and instances of burnout among the study participants. Practitioner burnout would be useful to assess

because the mixed methods study participants reported increased capacity, leadership skills, and desire to advocate for the profession of occupational therapy. It would be beneficial to assess these same beliefs and values and how perceived increased resiliency impacted future career choices, job satisfaction, and leadership capacities in their chosen practice areas.

It is further recommended that continued studies with larger participant groups be conducted with a control group in place to validate the research findings. For example, conduct a study with one group serving in a developing country and measure critical thinking and cultural competency outcomes against that of those serving in a traditional westernized U.S. context. Further value may be added to the findings by implementing research with a homogeneous sample size to help generalize findings and provide greater insight into the benefits of international servant leadership opportunities for occupational therapy students.

It would be beneficial for entry-level occupational therapy programs to explore the benefits of international experiences in culturally rich developing countries that encourage students to develop a practitioner lens beyond traditional and westernized views of engagement in occupations. Research for international Level I and Level II fieldwork while immersed in a developing country would also be advantageous and may facilitate cooperative partnerships that are rich in learning while meeting the diverse needs of international community partners. It would also be beneficial to design international fieldwork based on the feedback from international partners who evaluate student performance.

It is recommended that the SLPD model is used in replicating future servant leadership studies and cultural immersion experiences for occupational therapy students. This model can help guide cultural immersion and servant leadership opportunities to include foundational skills, experience characteristics, skills development, and professional development outcomes. Future

studies with the inclusion of the SLPD model may facilitate the development of creating expedited learning opportunities that can result in efficient cultural competency, critical thinking, and professional development skill sets.

It is further recommended that international servant leadership immersion experiences be examined in other health care disciplines or general higher education curricula. Cultural competency and clinical outcomes should be examined across other disciplines and compared to existing literature supporting servant leadership immersion experiences. It would be beneficial to pilot educational opportunities that provide educational and socio-economic diversity, and how this experience benefits higher education learners from a generational point of view. Furthermore, it would be beneficial to examine a cost/benefit ratio of implementing cultural immersion experiences versus traditional dyadic learning outcomes for expediting efficient learning outcomes.

### **Conclusion**

This mixed methods study illustrated that a 3-week servant leadership experience in Zambia, Africa, resulted in increased professional development for participating student occupational therapists. This study provided encouraging results on the benefits of infusing experiential learning opportunities into education occupations of students that contributed to developing dispositional skills for critical thinking and problem-solving capacities. The study illustrated that hands-on, experiential learning with a diverse culture contributed to gained cultural responsiveness when working with clients and populations that were outside of a westernized health perspective. This gained cultural lens for engagement in occupation led to greater self-awareness and appreciation for the cultural immersion experience, where student occupational therapists learned that it truly takes a village to support one another for engagement

in occupations. This gained cultural competency shaped their confidence to develop and deliver innovative client-centered intervention plans while in Zambia to meet the inclusive needs of the community served.

This study may help ameliorate the gap in occupational therapy literature on cultural immersion experiences and provides a SLPD model for programs to use in professional student development. Adaptation to the diverse global and societal needs of society is an urgent need for the profession of occupational therapy and accredited programs to address to ensure a dynamic workforce is available to meet the inclusive needs of individuals, communities, and populations across contexts to ensure quality of life and engagement in meaningful occupations.

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## Appendix A: OT 590 Recruitment Flyer

# ZAMBIA

## SUMMER 2018

**DATES ABROAD**  
July 14 - August 2, 2018

**APPLICATION DEADLINE**  
December 15, 2017


**COURSE**  
HS 490/OT 690/NURS 470: International Healthcare (3cr)

**COST**  
\$4,500 + tuition

**PRICE DETAILS**  
Covers airfare, housing, ground transport, health insurance, most meals, excursions, and visa

**CONTACT INFO**

All program information including cost, courses, dates, and other logistics are subject to change.




### Nursing, Health Science & Occupational Therapy

LIVINGSTONE

- A cross disciplinary educational experience adapted for the Zambian environment where students function as a team rather than individual professional specialists
- Experience the rich culture of Zambia and it's people through visiting rural and urban health care providers
- Increase cultural competence in caring for diverse populations and strengthen confidence in clinical settings
- Excursions to local markets, restaurants, and Zambia's Victoria Falls. Other adventures include hiking, rafting, bungee jumping and a jungle safari

# FACULTY-LED

## STUDY ABROAD



**SAGINAW VALLEY  
STATE UNIVERSITY**

Office of Academic Affairs

[svsu.edu/studyabroad](http://svsu.edu/studyabroad)

**Appendix B: Participant Recruitment Flyer**

**Attention:  
OT 590 Students!**

- You are invited to participate in a mixed methods study to measure professional development while completing a servant leadership experience in Zambia!
- The study will also measure changes in critical reasoning & cultural responsiveness.
- Participation is voluntary! If you would like to participate in this study, please contact:



## Appendix C: SVSU Informed Consent

	
Approved by SVSU IRB	
Expires on:	6/30/18
Ref #:	2016A003

**Saginaw Valley State University**  
**College of Health and Human Services, Occupational Therapy Department**

**Consent Form**

**Project Title:** *Servant leadership abroad: A program evaluation of occupational therapy student experiences in Zambia, Africa.*

**Principal Investigator/Faculty Advisor:** Jill Innes, MSOT, OTR/L

**Supported/Funded by:** This study is unfunded.

**Purpose of this Study**

The purpose of this study is to evaluate the professional development that may occur for you as an occupational therapy student who is participating in OT 590, an international course that is taking place in Zambia, Africa. This study will also measure changes that may occur in your critical reasoning and cultural responsiveness, and to gain insight on your perceived professional development while in Zambia. The research findings will also aim to inform occupational therapy practice, education, and develop future international learning courses.

You are being asked to be in this research study because you are an occupational therapy student who is participating in the elective course, OT 590; that will take place in Zambia, Africa in the summer of 2018. This study will include estimated 5-9 participants.

In order to be eligible to participate in this study, you will need to be at least 18 years of age and be full-time students during the academic year. You will also have to be enrolled in OT 590 for the summer semester of 2018, and be in good academic standing.





### Study Procedures

As a participant in this study, you will be asked to complete two pre-tests. The first pre-test is electronic, and will be administered on a university protected computer and will seek to measure your critical thinking skills. The second pre-test is in a paper and pencil format, and will measure your cultural responsiveness skills. These tests will be administered within three weeks of the departure to Zambia. The two assessments will be completed only by you, and are expected to take 40-60 minutes for the completion of both pre-tests. The tests will be administered by the principal investigator, in a quiet classroom in H 277, in the Health and Human Services Building at Saginaw Valley State University.

During the excursion of the trip, you will be asked to participate in three semi-structured interviews on days: 5 & 6, 12 & 13, 19 & 20, with the principal investigator while at the Home for AIDS Orphans in Mwandia, Zambia. The semi-structured interviews will be staggered over the course of two days to provide adequate timing, and to allow for adaptability to schedule changes that may occur at the Home for AIDS Orphans. Each interview will be expected to last 30-60 minutes, and will consist of informal and open-ended questions. The semi-structured interviews will ask questions about your professional development including: being a servant leader, perceived challenges, development cultural considerations, and therapeutic use of self. The semi-structured interviews will be digitally recorded and transcribed for analysis. The principal investigator will take notes in a journal during each interview to better understand the data obtained by you. All semi-structures interviews will be conducted and audio recorded by the principal investigator.

You will also be asked to participate in nightly debriefings as a group to discuss and process the daily activities while in Zambia. The principle investigator will record notes in a field journal to document the groups' daily activities as servant leaders. Hand-written notes will be recorded in the field journal and will remain in locked luggage when not being used during semi-structured interviews or nightly group debriefings.

As a study participant, you will be asked to participate in two post-tests after the conclusion of OT 590 that was offered in Zambia. The two post-tests will measure changes that may have occurred in your cultural responsiveness and critical thinking skills. The first post-test is electronic, and will take place on a university protected computer and will measure your critical thinking skills. The second post-test will be administered in a paper and pencil format, and will measure your cultural responsiveness skills. These tests will occur within three weeks of our return from Zambia. The two post-tests will be completed only by you, and are expected to take 40-60 minutes for the completion of both tests. The tests will be administered by the principal investigator, in a quiet classroom in H 277, in the Health and Human Services Building at Saginaw Valley State University.

### Possible Risks, Stresses or Discomforts

This research study involves minimal risk to you. To the best of our knowledge, the things you will be doing have no more risk of harm than you would have in everyday life.

There are several low risk factors associated with this mixed methods study.



Approved by SVSU IRB	
Expires on:	6/30/25
Ref #	201804003

You may find some questions we ask you to be upsetting or stressful. Psychological stress may occur as you openly dialogue about your learning experience while completing an international immersion experience in Mwandia, Zambia. Semi-structured interviews may evoke feelings of cultural tension and frustration as you explore and reevaluate your personal values and belief systems. You may also experience feelings of loneliness or homesickness.

Additional mild psychological stress may surface as you reflect upon and share your anticipated role as an occupational therapist. This mixed methods study may facilitate feelings of anxiety and stress due to increased awareness of diversity, and adverse thoughts of enculturation. The impact would pose minimal risk and discomfort, as well as heightened awareness to cultural differences. These mild psychological risks may occur regardless of the study, as you participate in an international learning experience in Mwandia, Zambia.

To decrease the occurrence of adverse effects of this study, the principal investigator will employ close monitoring of your emotional, social, and psychological wellbeing. Referral sources with the Student Counseling Center at Saginaw Valley State University will be made for phone consultation with the use of the principal investigator's international phone.

As a participant, you will be supported and encouraged to ensure adaptive coping is occurring in you and all research participants. The principal investigator will also reinforce the social supports within the group, and common mission to: learn, serve, and to work together a healthcare team in Mwandia, Zambia.

If you do experience psychological stress after the completion of the study, we can refer you to someone who may be able to help you with these feelings. You may contact the Student Counseling Center: <http://www.svsu.edu/studentcounselingcenter/>

There are no physical, social, or economic risks associated with this mixed methods study. There are also no group or community risks associated with this study.

Research participants such as yourself, are at a legal risk for a breach of confidentiality. The risk of a confidentiality breach is minimal. This could occur if your personal identifying information is released to someone outside the research team. All standard precautions will be taken to minimize these risks, and to prevent a break of confidentiality. Feelings of mistrust may arise, or the potential for disclosing personal identification may occur such as: release of names, and subjective content on the experiences of the research participants.

As in all research, there may be unforeseen risks to the participant. If an accidental injury occurs, appropriate emergency measures will be taken; however, no compensation or additional treatment will be made available to the subject except as otherwise stated in this consent form.

#### **Research/Subject/Participant Rights**

Your participation is 100% voluntary, and you have the right to leave this research study at any time, without penalty. If you decide to leave or you decide not to be in the study at any point in time, you will not be penalized by a reduction in points or grade in the OT 590 course. You are free to not answer any questions you choose; without penalty or reduction in points or grade for





OT 590. If you choose to stop being in the study, any information collected about you before the date you leave the study will be kept in the research records for 6 years from the conclusion of the study but you may request that it not be used in the collection of study outcomes. Per HIPAA regulations, records must be kept for 6 years after completion of all research activities.

#### **Possible Benefits for Me or Others**

The possible benefits to you from this study include: the potential to enhance your personal and professional development as a prospective occupational therapist. This experience may translate into the development of therapeutic use of self, cultural awareness, and cultural competency that is essential for developing an effective rapport with clients in the future. This research study also has the potential for you to learn how to create client-centered treatments with limited resources. This experience has the potential to translate into greater professional growth as a future occupational therapist; however, there is no guarantee that these benefits may impact future academic or professional roles. Taking part in this study may help the Occupational Therapy Department to better understand the benefits of offering international immersion experiences to future students.

#### **Anonymity and Confidentiality**

Information we learn about you in this research study will be handled in a confidential manner, within the limits of the law and will be limited to people who have a need to review this information. Your name will be coded with a pseudonym and will be documented accordingly on all data collection and analysis forms to protect your personal information. The master sheet of your participant information will be stored in a separate, locked cabinet in office H213 and all results will remain confidential.

Information obtained from the paper and pencil pre-test and post-test that measures your cultural competency skills will remain confidential. Your privacy will be ensured by coding your name with a pseudonym. This will be documented by the principal investigator; on will remain anonymous on all data collection and analysis forms. The master sheet of your pseudonym will be stored in a locked cabinet in office H213.

Information collected from an online pre-test and post-test that will measure your critical thinking will be administered on a SVSU password protected computer. All information about you will remain private. You will be provided with a user name and login, and will give consent prior to the administration of the survey. You will be asked to input a unique number that will match your previously assigned pseudonym, to provide a time stamp of your consent of this survey. De-identified scores will be sent back to the password protected SVSU email of the principal investigator. Data will only be identified by matching the unique number to the assigned pseudonym, which will remain in a locked cabinet of H 213.

All audio recordings of your interviews will be captured on a recording device, and will remain in locked luggage while abroad, and will be later stored on a university password protected laptop upon return from Zambia. The principal investigator will transcribe all audio recordings, which will be labeled by the pseudonym given to you. The previously recorded audio files on the recording device will be erased upon arrival back to Saginaw Valley State University.



Approved by SVSU IRB	
Expires on:	6/30/16
Ref #:	2014M0023

The field journal will be stored in locked luggage while abroad and will be later transcribed by the principal investigator, and stored on a password protected university laptop. The field journal will be shredded after data is inputted into the password protected laptop. The research material will be backed up on SVSU One Drive which will be protected by an SVSU password. The research files will also be backed up on a flash drive and stored in a locked cabinet in H 213. If you choose to discontinue participation in the study, all identifiable information will be erased, shredded or eliminated. This data will not be included in the interpretation of the study results.

Your confidential data, including any research documentation, will be securely stored in a locked filing cabinet in H 213, or on a password protected laptop in the office of Principal Investigator in the Health and Human Services Building, at Saginaw Valley State University. All data will be kept for 6 years and will be destroyed by shredding all research materials after that time.

Only members of the research team will be granted access to the research documentation. At no time will the researchers release the results of the study to anyone other than individuals working on the project without your written consent. Research data will be available to the Institutional Review Boards of Saginaw Valley State University, and the University of the Principal Investigator, Nova Southeastern University. If we publish the results of the study in a scientific journal or book, we will not identify you. All HIPAA laws will be followed by the Principal Investigator.

As a research participant, you will be asked to respect the privacy and confidentiality of all fellow participants. You will be asked to keep all personal information about yourself and others confidential. You will be asked not to discuss any information regarding the study, including design, implementation, analysis or results to participants outside of the research study.

### **Confidentiality and Privacy Rights**

Participation in this research study may result in a loss of privacy, since persons other than the investigator(s) might view your study records. Unless required by law, only the study investigators, members of the investigator's staff, Saginaw Valley State University Institutional Review Board, Nova Southeastern University's Institutional Review Board, and representatives from the IRB Research Compliance Office have the authority to review your study records. They are required to maintain confidentiality regarding your identity.

- Results of this study may be used for: teaching, research, publications, and presentations at professional meetings. If your individual results are discussed, your identity will be protected by using a pseudonym rather than your name or other identifying information. If you wish to be identified with your results, indicate this at the end of the form, where an option will be provided.
- You do have the option of being identified or associated with your participation in the study that takes place at Saginaw Valley State University and in Zambia, Africa if you choose to participate in sharing your experience or work.

### **Compensation**

You will not be given any payments or compensation for being in this research study. Participation in this study will involve no cost to you.



Approved by SVSU IRB	
Expires on:	6/30/19
Ref #:	2018M0023

#### Questions or Concerns about this Research Study:

If you have any questions, problems, illness, or injury during your time on this study, call us promptly. Jill Innes is the person in charge of this research study. You can call her at [redacted] [redacted] Monday-Sunday, from 9:00AM-9:00PM. You can also call Wendy Stav, Co-Investigator, at [redacted] Monday-Friday, from 9:00AM-5:00PM with questions about this research. The participant may also contact the Chair, Human Subjects Institutional Review Board (989-964-7488; irbchair@svsu.edu) if questions or problems arise during the course of the study.



Approved by SVSUI IRB	
Expires on:	05/19
Ref #:	2018MAC003

## Consent

### Subject's Responsibilities

Subject voluntarily agrees to participate in study. They have the following responsibilities:

- Report any experiences of psychological stress, including feelings of anxiety or stress to the Principal Investigator as soon as possible.
- You are asked to keep all personal information about yourself and others confidential.
- You will be asked not to discuss any information regarding the study, including: design, implementation, analysis or results to participants outside of the research study.

### Subject's Permission

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form after I sign it.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and reference number in the upper right corner. Subjects should not sign this document if the corner does not show a stamped date and reference number.

\_\_\_\_\_  
Subject's Name (printed) and Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name (printed) and Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

### Dissemination of Research Findings:

You have the option of being identified with your participation with the results of this study. This could include any scientific publications or presentations.

Initial one of the following to indicate your choice:

\_\_\_\_\_ (initial) I agree to share my identity with the dissemination of the research study.

\_\_\_\_\_ (initial) I do not agree to share my identity with the dissemination of the research study.

You also have the option to allow researchers to take photographs of you that may be used in scientific publications or presentations. With your permission, researchers may publish and present photographs which may include your face. No other personal information about subjects will be included in the presentation.



Approved by SVSU IRB	
Expires on:	date
Ref #:	0000000000

Initial one of the following to indicate your choice:

\_\_\_\_\_ (initial) I do give permission for photographs of me to be used in the dissemination of the research study.

\_\_\_\_\_ (initial) I do not give permission for photographs of me to be used in the dissemination of the research study.

## Appendix D: NSU Study Consent

1/18/2019

IRB No. 2018-332-Non-NSU-Univ (IRB)



### ▼ IRB No.

<b>IRB No.:</b> 2018-332	<b>Sponsor(s):</b>
<b>Committee:</b> Institutional Review Board	<b>Sponsor Id:</b>
<b>Category:</b>	<b>Grants:</b>
<b>Department:</b> Dr. Pallavi Patel College of Health Care Sciences	
<b>Agent Types:</b> Educational Intervention • Survey/Assessments	<b>CRO:</b>
<b>Study Title:</b> Servant leadership abroad: A program evaluation of occupational therapy student experiences in Zambia, Africa.	<b>Year:</b> 2018
<b>Expedited/Exempt Review Category:</b> Exempt 1: Educational research in educational settings	
<b>Comments:</b> The purpose of this study is to evaluate the professional development process that may occur for occupational therapy students who are participating in OT 590, an elective international course that is being offered from July 17th-August 8th, 2018 in Zambia, Africa. This study will also measure changes in critical thinking and cultural responsiveness, to gain insight on the professional development that may occur for students.	

### IRB No.-Site

<b>Site(s):</b> Non-NSU-Univ - Non-NSU Univ	<b>PI:</b> Innes, Jill
<b>Status:</b> Exempt	<b>Additional:</b> N
<b>Approval:</b> June 11, 2018	<b>Expiration:</b> Exempt
<b>Initial Approval:</b> June 11, 2018	<b>Other Expirations:</b> Exempt Check-In - 06/11/2019
<b>Comments:</b>	

### ▼ IRB No.-Site Contacts (3)

Name	Role
Colon, Rose M. PhD	College Level Reviewer
Stallings-Sahler, Susan	College Level Reviewer
Stav, Wendy PhD	Faculty Advisor

### ▼ Events (1)

Event	Att	FE	Instance/UDF	Start	Complete	Last Mtg
New Exempt/NHSR Submission	12			06/27/2018	06/27/2018	

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 Steampunk (2017.11.833.0/Release/451b6f15c88957cc427342d420244f7c9b8f85e0)  
 TP-WEB01 at 2019-01-18 13:19:01Z  
 Page generated in 0.111 seconds.

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## Appendix E: CCTDI

\*The CCTDI is a copyrighted tool by InsightAssessments.com and can be reached at

<https://www.insightassessment.com/>



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### California Critical Thinking Disposition Inventory (CCTDI)

**Request Information**

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[Preview](#)

#### California Critical Thinking Disposition Inventory (CCTDI)

The California Critical Thinking Disposition Inventory is the premier tool for surveying the dispositional aspects of critical thinking. The CCTDI is specifically designed to measure the disposition to engage problems and make decisions using critical thinking. One must be disposed to think critically as well as have the skills to do so. The CCTDI is designed for use with the general adult population.



#### CCTDI Purpose

The CCTDI measures the "willing" dimension in the expression "willing and able" to think critically. High scores on the California Critical Thinking Disposition Inventory are positively correlated with a strong desire to apply one's critical thinking skills in decision making and problem solving, with leadership, with ego resilience, and with the capacity to benefit from educational training and psychological counseling.

- The CCTDI is based on the expert consensus characterization of the "ideal critical thinker" articulated in the APA Delphi Report.
- The CCTDI is calibrated for use with the general adult population including workers and working professionals at all levels and students in grades 10 and above, including undergraduates, technical and professional school...

#### Getting Started

- [Welcome to Insight Assessment](#)
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- [Price Quote Request Form](#)

#### Client Solutions

##### Determining Students' Willingness to Think

The CCTST is often used to measure college students' ability to apply their critical thinking skills. The California Critical Thinking Disposition Inventory CCTDI is specific...

##### Pharmacy Schools Assess CT

Pharmacy schools around the country are administering Insight Assessment critical thinking test instruments (the Health Sciences Reasoning Test, the California Critical Thinking Skill...

##### Schools of Dentistry Require CT Measurements

Dental schools around the country are administering Insight Assessment critical thinking test instruments (the Health Sciences Reasoning Test, the California Critical Thinking Skills...

##### Measure Intellectual Curiosity

Insight Assessment tools are used to measure

## Appendix F: IAPCC-SV

\*The IAPCC-SV is a copyrighted tool by Dr. Campinha-Bacote. She can be contacted directly at meddir@aol.com or visit her website at [www.transculturalcare.net](http://www.transculturalcare.net).



### \*ABOUT THE IAPCC-SV©

#### Application:

The IAPCC-SV is designed to measure the level of cultural competence among undergraduate students in the health professions.

#### Description:



## **Appendix G: Interview Schedule**

### **Days 5 and 6:**

1. What is the process of your perceived professional development that you have experienced?
2. What is your current mindset in terms of growth? Have you gained any critical thinking or problem solving skills during this international service learning experience in Zambia, Africa?
3. How is your confidence for providing services as a servant leader during this experience in Zambia, Africa?
4. Have you noticed any changes to your cultural thinking? How do you feel about working with clients from diverse cultural backgrounds?
5. What questions, comments, or thoughts do you have on your overall experience in Mwandi, Zambia?

**Days 12 & 13:**

- 1) Are there any current highlights or learning occurrences that you have experienced and want to share? Has your thinking changed? If so, how?
- 2) Are there any challenges that you have experienced and want to express? If so, how did you cope with these issues?
- 3) What is your current mindset in terms of your developing therapeutic use of self or cultural thinking while in Mwandi?
- 4) How has your confidence remained the same or changed for providing services as a servant leader during this service learning experience in Zambia, Africa?
- 5) Are there any changes in your critical thinking or problem solving that you have experienced in Mwandi? If so, can you please explain?
- 6) What questions, comments or thoughts do you have on your overall experience in Mwandi, Zambia?

**Days 19 & 20:**

- 1) What changes are you experiencing in your personal or professional self as a result of this study?
- 2) How has your therapeutic use of self developed or changed in providing services for others from a culture diverse from your own?
- 3) Has growth occurred in your OT leadership practices as a result of this study? If so please explain this process of change.
- 4) How has your cultural thinking changed as a result of this international study? Please explain this process. How do you feel about working with clients from diverse cultural backgrounds in your future OT practice?
- 5) What have you learned that you would like to back with you as a leader in your future OT practice?
- 6) What questions, comments or thoughts do you have on your overall experience in Mwandi, Zambia?
- 7) Would you recommend this experience for future OT students? If so, why?

## Appendix H: Photo Release



University Communications • 389 Wickes Hall • (989) 964-4086

### CONSENT AND RELEASE

I hereby give to Saginaw Valley State University, and its Board of Control, and all other agents, representatives, permission for the following:

- a) The unrestricted right and permission to copyright and use, re-use, publish, and republish photographic portraits or pictures of me or in which I may be included intact or in part, composite or distorted in character or form, without restriction as to changes or transformations in conjunction with my own name, or reproduction hereof in color or otherwise, made through any and all media now or hereafter known for illustration, art, promotion, advertising, trade, or any other purpose whatsoever.
- b) I also permit the use of any printed material in connection therewith.
- c) I hereby relinquish any right that I may have to examine or approve the completed product or products or the advertising copy or printed matter that may be used in conjunction therewith or the use to which it may be applied.
- d) I hereby release, discharge and agree to save harmless the photographer, his/her heirs, legal representatives or assigns, and all persons functioning under his/her permission or authority, or those for whom he/she is functioning, from any liability by virtue of any blurring, distortion, alteration, optical illusion, or use in composite form whether intentional or otherwise, that may occur or be produced in the taking of this photograph or in any subsequent processing thereof, as well as any publication thereof, including without limitation any claims for libel or invasion of privacy.
- e) My consent shall commence on the date of execution listed on this Release and shall continue in perpetuity.
- f) **GRANT.** Grantor hereby grants to SVSU and its Board of Control and all other agents and representatives, the worldwide right, in any medium or form of publication now or hereinafter developed, to use the name of Grantor as set forth below. Grantor waives the right to inspect or approve the finished products, except as provided herein. Grantor grants SVSU the right to:
  - List Grantor as a student/former student of SVSU in news releases, marketing materials and other promotional items.
  - Use Grantor as a case study, feature or spotlight article or marketing piece.
  - Use quotations provided by Grantor.
- g) **RELEASE.** Grantor hereby releases SVSU and its assigns from any and all claims related to this release including but not limited to defamation and invasion of the rights of publicity or privacy in regard to such use.
- h) **OWNERSHIP OF MATERIALS.** SVSU shall not gain any rights, title or interest to Grantor's name or trademarks other than the right to use the materials as described herein. SVSU shall solely own all products and materials incorporating the Grantor's name or testimonial. Grantor acknowledges that there shall be no obligation on the part of SVSU to utilize the Grantor's name or testimonial or rights being released to SVSU under this release.
- i) **RELATIONSHIP OF PARTIES.** This Consent and Release does not constitute and shall not be construed as constituting a partnership, agency, commercial agency or joint venture between Grantor and SVSU. Neither party shall have any right to obligate or bind the other party in any manner whatsoever, and nothing herein contained shall give, or is intended to give, any rights of any kind to any third persons.
- j) I hereby affirm that I am over the age of majority and have the right to contract in my own name. I have read the above authorization, release and agreement, prior to its execution; I fully understand the contents thereof. This agreement shall be binding upon me any my heirs, legal representatives and assigns.

PRINT

Name: \_\_\_\_\_

Signed: \_\_\_\_\_

Home  
Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Witness: \_\_\_\_\_

Date: \_\_\_\_\_ IMG # \_\_\_\_\_

## Appendix I: SVSU IRB Approval Letter



888.964.4000 • From Midland 888.852.1400  
1400 Bay Road • University Center, MI 48710 • USA  
IRB@SVSU.EDU

DATE: June 5, 2018

TO: Jill Innes, MSOT  
FROM: Saginaw Valley State University Institutional Review Board

STUDY TITLE: [1244345-1] Servant leadership abroad: A program evaluation of occupational therapy student experiences in Zambia, Africa.

IRB REFERENCE #: 2018MC033Rose-Barry  
SUBMISSION TYPE: New Project

ACTION: APPROVED  
APPROVAL DATE: June 5, 2018  
EXPIRATION DATE: June 5, 2019  
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this research study. Saginaw Valley State University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Informed Consent is required:

Please remember that informed consent is a process beginning with a description of the study and insurance of participant's understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

Once the project is completed, a close-out form must be submitted via IRBnet.

If you have any questions, please contact Melissa Woodward at (888) 964-4288 or mal@svsu.edu. Please include your study title and reference number in all correspondence with this office.

cc:

## Appendix J: SVSU Study Site Approval



(888) 964-4000 • From Midland: 685-5326  
7400 Bay Road • University Center, MI 48710 • USA  
[www.svsu.edu](http://www.svsu.edu)

June 6<sup>th</sup>, 2018

Dear NSU IRB Committee,

I give permission to Jill Innes, Assistant Professor of Occupational Therapy, to conduct her mixed methods study in the Health and Human Services Building at Saginaw Valley State University.

This permission includes the administration of the California Critical Thinking Disposition Inventory (CCTDI) and the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Student Version (IAPCC-SV).

Jill Innes plans to administer the assessment tools three weeks prior, and three weeks after the conclusion of the study abroad trip to Zambia, Africa; July 17<sup>th</sup>-August 8<sup>th</sup>, 2018.

Sincerely,

A handwritten signature in cursive script that reads 'Judith P. Ruland'.

Judith P. Ruland PhD RN CNE  
Dean  
College of Health and Human Services

Saginaw Valley State University  
7400 Bay Road,  
University Center, MI 48710  
Office Phone: 989 964-4145  
Cell: 386 478-9282  
email: [jruland@svsu.edu](mailto:jruland@svsu.edu)

## Appendix K: Home for AIDS Orphans Study Site Permission

6/6/2018

Mail - jmkillin@SVSU.edu

**Re: FINALLY THE LIST!!**

**Paula Winland <paula.winland@gmail.com>**

Wed 6/6/2018 5:45 AM

To: Jill M. Innes <jmkillin@SVSU.edu>;

Hey Jill

Wow honey great new about the study and of course you have our complete support and approval to do it at the camp anytime. Do you need me to write a formal letter to SVSU on letterhead for you or is this email okay?

We are so looking forward to having you with us and the Botswana safari should be a good one as its in August so lots of game!!

It won't be long now!! OH one thing can you find out from who ever if you have any vegetarians in the group or eating issues we need to know asap in order to have the proper food for them.

Cheers honey  
Paula

Paula Van Zyl  
Chairperson

HOME FOR AIDS ORPHANS  
A Registered non profit NGO  
Mwandi Western Province Zambia  
P.O. Box 61259 Livingstone Zambia

Past President Rotary Club of Livingstone 2013-2014  
International Projects Chair 2014-

(260) 978 090819

[www.homesforaidsorphans.com](http://www.homesforaidsorphans.com)

On Tue, Jun 5, 2018 at 9:56 PM, Jill M. Innes <jmkillin@svsu.edu> wrote:  
**Hi Paula!**

I hope you are doing well!! I cannot wait to see you! The countdown is on:). I have some good news! I got approved to complete a study on how our trip to the Zambia improves the professional development of our students. The study is apart of my school requirement, and the goal is to publish the results of how beneficial it is to study and volunteer at the Home for AIDs Orphans!

The study would involve me interviewing the OT students about their professional growth during our downtime at the camp. Do you think you could write an email back saying that I have permission to complete a study on the SVSU students while at the Home for AIDS Orphans camp?

It is my ultimate goal to present the evidence on the benefit of study abroad in Zambia, which might help us gain grant money or resources for the Home for AIDs Orphans. Someday I hope! It's my dream. Our trip to Zambia makes such a big impact on us, and we hope to make the same impact when we visit!

Looking forward to seeing you soon!

<https://outlook.office.com/owa/?realm=svsu.edu&vd=email>

1/5